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STEROIDS IN AMATEUR AND PROFESSIONAL SPORTS—THE MEDICAL AND SOCIAL COSTS OF STEROID ABUSE

HEARINGS

BEFORE THE

COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

THE STEROID ABUSE PROBLEM IN AMERICA, FOCUSING ON THE USE OF STEROIDS IN COLLEGE AND PROFESSIONAL FOOTBALL TODAY

APRIL 3, 1989—NEWARK, DE
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CONTENTS

Hearings held on: Page
Monday, April 3, 1989 1
Tuesday, May 9, 1989 101

STATEMENTS OF COMMITTEE MEMBERS

Biden, Chairman Joseph R., Jr 1, 101
Kohl, Hon. Herbert 105
Specter, Hon. Arlen 108
Grassley, Hon. Charles E 150
Thurmond, Hon. Strom 125

CHRONOLOGICAL LIST OF WITNESSES

MONDAY, APRIL 3, 1989

Evelyn Ashford, Olympic gold medalist; Pat Connolly, coach and trainer; Diane Williams, former U.S. national champion 5
Pat Croce, conditioning trainer, Philadelphia 76ers, Philadelphia Flyers; Mike Schmidt, Philadelphia Phillies; Mike Quick, captain, Philadelphia Eagles; Otho Davis, head trainer, Philadelphia Eagles; executive trainer, National Athletic Trainers Association; Dorothy Baker, member, executive board, U.S. Olympic Committee 29
Dr. Charles Yesalis, professor, Pennsylvania State University; Dr. David Katz, faculty member, Harvard Medical School, Duke University School of Medicine; Dr. Edward L. Langston, representative, American Medical Association 46

TUESDAY, MAY 9, 1989

Pete Rozelle, NFL commissioner, accompanied by Chuck Noll, head coach, Pittsburgh Steelers; Marty Schottenheimer, head coach, Kansas City Chiefs; and Jay Moyer, NFL executive vice president and legal counsel 109
Gene Upshaw, executive director, NFL Players Association; Bill Fralic, three-time all-pro offensive lineman, Atlanta Falcons, NFL Player Representative for the Falcons; and Steve Courson, former NFL player, Pittsburgh Steelers and Tampa Bay Buccaneers 161
Joe Paterno, head coach, Penn State University; Bo Schembechler, head football coach and athletic director, University of Michigan; Harold Raymond, head coach, University of Delaware; and Joe Purzycki, head coach, James Madison University 217

ALPHABETICAL LIST AND MATERIAL SUBMITTED

Ashford, Evelyn:
Testimony 5, 20
Baker, Dorothy R.:
Testimony 34
Biden, Chairman Joseph R., Jr.:
Article from Sports Illustrated, dated May 1985, entitled "Steroids: A Problem Of Huge Dimensions" 200
Connolly, Pat:
Testimony 5
Prepared statement 24
Courson, Steve:
Testimony 184
Prepared statement 187

Page

Croce, Pat:
Testimony 29
Davis, Otho:
Testimony 30
Prepared statement 32
Letter by Pete Rozelle, regarding NFL policy toward anabolic steroids 33
Fralic, Bill:
Testimony 179
Prepared statement 181
Katz, David:
Testimony 56
Report of the Ross Symposium on Muscle Development: Nutritional Alternatives to Anabolic Steroids 58
Langston, Edward L.:
Testimony 68
Prepared statement 71
Report of the Council on Scientific Affairs 81
Moyer, Jay:
Testimony 123
Noll, Chuck:
Testimony 123
Paterno, Joe:
Testimony 217
Purzycki, Joe:
Testimony 221
Prepared statement 223
Raymond, Harold:
Testimony 220
Rozelle, Pete:
Testimony 111
Prepared statement 115
NFL documents 134
Schembechler, Bo:
Testimony 218
Schottenheimer, Marty:
Testimony 109
Upshaw, Gene:
Testimony 161
Prepared statement 164
Williams, Diane:
Testimony 10
Yesalis, Charles:
Testimony 46
Prepared statement 49

APPENDIX

Letter from the American Medical Association 242
Letter from Robt. B. Kerr, M.D., medical information 244
Anabolic Steroid Survey by the National Youth Sports Coaches Association 249

STEROIDS IN AMATEUR AND PROFESSIONAL SPORTS—THE MEDICAL AND SOCIAL COSTS OF STEROID ABUSE

MONDAY, APRIL 3, 1989

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
Newark, DE.

The committee met, pursuant to notice, at 10:00 a.m., in room 101-B, Clayton Hall, University of Delaware, Newark, DE, Hon. Joseph R. Biden, Jr., chairman of the committee, presiding.

OPENING STATEMENT OF CHAIRMAN JOSEPH R. BIDEN, JR.

The CHAIRMAN. The hearing will come to order.

I would like to, as we say in the Senate, have one point of personal privilege before I make my opening statement and introduce our witnesses on our first panel. Tubby Raymond, the coach and legend here at the University of Delaware, is the man smart enough to know that I did not have enough talent to be a great football player and said, Joe, go into politics. Actually he did not say that. But Tubby, would you stand up so everybody can see one of the great football coaches in the country. [Applause.]

Spring practice starts today. The only thing that is worse than spring practice is preseason practice. But I wish you luck, Coach, and obviously we hope for a good year.

Ladies and gentlemen, one of the advantages of being chairman of the Senate Judiciary Committee is when you hold field hearings, you can decide where to hold them. And it is good to be home here at my alma mater. Obviously, as all of us are in the Senate, I am proud of the college from which I graduated. And I want to point out to the press I did graduate. [Laughter.]

The reason for holding the hearings here, and there will be other hearings, is that in my State and in this region, the University of Delaware is one of those places that, like other great universities in this region, young athletes from our State dream of coming to and playing at. It has a reputation of excellence in sport, as well as in academics. And it is an example, I think, of one of those places, like many others, where you can succeed and succeed fairly and where values are still taught. Values are taught to the athletes and I say this with Coach Raymond in the room, academics are still viewed as a more important reason for attending a university. And Coach Raymond follows on a tradition of a great man here at the University, Dave Nelson. And so it is a tradition of excellence.

Young high school students who are part of the reason for us having this hearing, will read our local papers today. The fact that it was held here at the University of Delaware will carry more significance for them and that is a brief explanation of why we are here.

Now, let me tell you why, period. This hearing will probably be the first of several we will have.

Last summer, millions of us were inspired by what we took to be a new level of human performance, a new barrier broken. The idea that man and woman could extend their bodies to heights and levels that we never thought possible, such as Ben Johnson in his Olympic gold-medal run. Later, as we all learned, his incredible performance was exactly that, incredible. When we realized that Johnson's performance had been achieved with the help of steroid drugs, the Nation of Canada, the United States and all the world felt somehow cheated and angry. Not only because we had been deceived by one athlete, but even more because our trust in the fairness that the athletic competition had been abused. There were a lot of angry headlines here and in Canada and all over the world.

And I think it is especially appropriate that we begin these Senate Judiciary Committee hearings with testimony from great Olympians and professional athletes and coaches. Not because the problem of steroid abuse stops with the athletic world, but because it is the prominence of athletes that has brought the problem to the public's attention. And because the pressure on athletes is much greater, obviously, than in any other area.

The use of steroid in sports is troubling for a number of reasons. First, steroid abuse threatens the mental and physical welfare of thousands of our fittest, healthiest and brightest young people.

Second, as experts have told us, and we will hear today and in future hearings, steroids could become another "gate-way drug," a phrase that's now being used. "Gate-way drug" refers to marijuana, cocaine and other drugs. If young people accept the idea that using steroids to build their body is okay, they may be all the more likely to try other drugs to alter their minds, as well as their bodies.

And third, using drugs to improve athletic performance undermines our most basic notions of honesty, discipline and hard work as a means for achieving. And it also undermines, quite frankly, our value system, the so-called American way, as we, in such a self-serving way, use the phrase.

And finally, the words and deeds of athletes are critical because they are role models for all people, not just athletes, and young people.

As I said earlier, I got a chance to meet the three women in the panel before us. As a would-be athlete it is truly a genuine honor to meet people of your caliber, your fame and your ability. And so it is not just young people who hold you up. It is a lot of people like me.

And sadly, we are learning that a wide spectrum of young people may be tempted by the allure and the promise that steroids hold for their potential athletic achievement.

A recent study found that more than 6 percent of male American high school seniors have used steroids. And 40 percent of those stu-

dents first used these drugs when they were 16 years old or younger. On the national scale, those statistics suggest that between 250,000 and 500,000 teen-aged lives are threatened by the many dangers imposed by steroid abuse.

And I have no reason to believe that the numbers would be any different in my own State of Delaware, particularly given what I have learned about drug use in the high schools and colleges throughout this region and throughout the country.

I probably visit more colleges than most of my colleagues speaking on college campuses. And I make it a practice, with a notable interruption in the last year and a half, of trying to hit almost every high school in this State once a year to speak to the student bodies.

As I have traveled around, I have asked those in the audience who have used drugs or who have known someone who is now abusing drugs, to raise their hand. Without exception, whether it is the finest private school in this State or whether it is the toughest public school or private school in the State, about 75 to 85 percent of the students raise their hand. And now we are realizing that not only do parents have to worry about their kids coming to parties where they use cocaine or other drugs, they also have to worry about their kids in the locker rooms and the gymnasiums being pressured or pressuring themselves into ingesting or injecting steroids into their body.

Young people represent an especially vulnerable target and an especially valuable market for what has become an everyday business of peddling black market steroids. These drugs appear to young people not only as a way of gaining the edge in athletic competition, but also as a means of improving their looks and their image. And every parent knows those concerns are closely associated with their children's sense of their self-worth and their success.

I do not think I am the only one in this room who was a relatively good athlete or high school athlete. But I could never get above 150-155 pounds no matter what I did. And at six one, 155 pounds, you would have been a lot better off at six one, 190 pounds. One of the purposes of this hearing is to get a message across to a lot of people like me at that age when sports was the single most important thing in my life. At the time, if someone came along with a weight program and a drug that was not illegal and told me I could take it, I would have well considered doing that, like an awful lot of students do. These drugs appeal to young people, who do not develop as quickly and do not develop as well in areas where they want very badly to compete. The demand has, in fact, fueled a black-market trade that has become a $300 to $400 million industry with more than enough profit to attack the drug traffickers and more than enough initiative for them to push steroids on our children who might otherwise never have come in contact with them.

Last year I introduced an amendment to the Anti-Drug Abuse Act to signal that we are going to single out illegitimate distribution of the drug that was intended to be advertised as harmless and that is steroids. The amendment made illegal distribution of anabolic steroids a felony, punishable by 3 years in prison. In the case of steroid distribution to young people under the age of 18, the punishment is 6 years in prison.

The amendment made a start toward solving the problem, but now it is time to go further. I think we have to consider an act in legislation which I proposed to make it a separate criminal offense to use the U.S. mail to distribute steroids, a practice that has spread the drug into communities large and small throughout the Nation.

Beyond that proposal, we need to consider adding steroids to the list of "controlled substances," treating them the same way we treat other dangerous drugs such as cocaine and heroin. This is an important issue, and although it is not totally resolved, I intend to discuss it at these hearings and at other hearings with expert medical witnesses.

Most importantly, we need to change attitudes about the use of steroids and other drugs. And that is why I have called this hearing today.

We have just passed a $2.8 billion anti-drug bill and half of the purpose of that bill is to get us to focus on demand. Why do people take these drugs? The sale of illegal drugs is a 100 plus billion dollar industry. We can hire all the policemen in the world and spend all the money in the world, but we are not going to solve the problem until we figure out how to deal with the demand side. Why do people take drugs? How can we educate them not to take them? And how do we get them off the drug once they are on it?

There are many reasons why people take drugs in the first instance, but I think one of them is the pressure to succeed at sports, at love, and at competition. And steroids are, I think, the most clear and blatant example of that kind of pressure in using a drug.

Through the testimony of such nationally and internationally recognized athletes as Evelyn Ashford, Diane Williams, Mike Quick and many others we hope to get a basic life-saving message across to our young people in this country—you can be successful as an athlete, even an Olympic gold-medalist, without using steroids. And at the same time I want to get a clear message to the pushers of the drugs, including unscrupulous coaches and doctors who are willing to risk the lives of their athletes and patients in the pursuit of fame and glory, that distributing steroids is wrong and that those who do it face serious penalties.

There is one last message that I would like to get across. We cannot continue the notion of plausible deniability in this country. I am in the process of contacting NFL coaches and major college coaches in the Nation. And guess what? We are having trouble getting them to testify. I want to promise you that if they continue to refuse to come and testify, I will see to it that this committee let everybody know why. If they will not come and tell us why, we can only speculate why they will not come and testify to tell us what should and should not be done. Hopefully it has just been a scheduling problem so far, but if it is not, we cannot continue this notion of plausible deniability—"I do not care how my athlete got so big and got so fast; I am winning with that athlete." They should care. I'm not suggesting they be held criminally responsible, but if they know something is going on and turn their back, they are equally as guilty. In the law there are nonfeasors and malfeasors. Nonfeasors are as bad as malfeasors.

When Ben Johnson failed last summer, in a very real sense, we failed. This year we need to make a commitment to succeeding together, not only in discouraging the abuse of steroids and other dangerous drugs, but even more in sharing our traditions, our values and our hopes for the future more effectively, with the young people upon whom our future depends.

Our first panel of witnesses is made up of Evelyn Ashford, Olympic gold medalist, in 1984, a silver medalist in 1988 in 100 meters, and gold medalist in 1988 in women's for the 400-meter relay. And Diane Williams, former U.S. national champion and winner of the bronze medal in the 1983 world championships in the 100 meters. And Pat Connolly, three-time Olympic competitor in track, former coach of Evelyn Ashford, former women's track coach at UCLA. They are our first distinguished panel.

And with that, I will now ask if the witnesses would like to open with a statement, if they have one, in the order in which I introduced you. Thank you all for coming.

STATEMENT OF EVELYN ASHFORD, OLYMPIC GOLD MEDALIST; PAT CONNOLLY, COACH AND TRAINER; DIANE WILLIAMS, FORMER U.S. NATIONAL CHAMPION

Ms. ASHFORD. I don't have a statement.

The CHAIRMAN. Does anyone have an opening statement at all? Miss Connolly, do you have an opening statement?

Ms. CONNOLLY. I am assuming this is the opening statement that John was talking about; right?

The CHAIRMAN. Yes.

Ms. CONNOLLY. I am not so sure that, just with reference to your remarks, that steroids enhance lovemaking.

The CHAIRMAN. No. I was not suggesting that. What I was suggesting is that there are a number of reasons found in other studies on controlled substances, that suggest there are those who take drugs because they believe that it can provide them with the confidence they did not otherwise have that allows them to do a lot of things.

STATEMENT OF PAT CONNOLLY

Ms. CONNOLLY. Admitted Canadian drug-users, Francis and Issajenko, have accused me, as an athlete and a coach, of using steroids. For those people who know me and have publicly defended me, the Canadians false allegation seem ludicrous, but I am familiar with this self-serving logic. Drug users in the U.S. have always claimed that everyone is using drugs to justify their own guilt.

Francis obviously does not know anything about me because my own verifiable story speaks for itself, as well as answers the questions that you have asked me to address.

For the purpose of this testimony, references to "team" mean U.S. Women's Track and Field Team, where I have my most experience.

On my first two Olympic teams in 1960 and 1964, we did not know what performance-enhancing drugs were. We had a different problem. There were men posing as women who were competing in setting records in women's events.

It was no wonder my grandmother and others tried to dissuade my mother from letting me run track. They were afraid that my competing in the Olympics would turn me into one of those masculine freaks. I was told I would never be able to have babies if I trained that hard. I set out to prove the worries were unfounded. The exhilaration of returning and jumping, literally around the world, was just too much fun.

I got married in 1963 and had a baby in 1966. I was eager to disprove the myth about women athletes. I nursed my 4-month-old son in between events of my fifth national pentathlon champion. I won, not only the title, but people were beginning to believe that hard training and competition did not masculinize women.

In 1967 at the Pan-American games in Canada, we had to take a very embarrassing sex test. We complied with the test, happy that at last the men would be eliminated from our competitions.

By the 1968 Olympic games in New Mexico City, we had to be retested by chromosome analysis of cells scraped from our cheeks. Hermaphrodites, women with a chromosome anomaly that gives them a hormonal male-like advantage, would now be eliminated from the women's events and we would be free to compete only against other natural women.

What most of us did not know then, but have since discovered, was that some of our European competitors were taking male hormones to enhance the performances. The doses they were then taking, by today's standards, were so low that there were no obvious changes in their physical appearances.

American women were always getting the bad rap because we were constantly trounced in international meets by our European and Soviet counterparts, but I knew no one on our team who had used male hormones. We were proud of our athletic prowess and our femininity.

In my preparation for the Munich Olympics, I was told by a coach that I did not have a chance to win a medal if I did not use steroids. When he explained what they were, I was devastated. And though I was still the No. 1 American, I did not even go to the Olympic trials. No way was I going to turn myself into a man because I wanted more children.

This coach did not give up. It appeared to me that he saw steroids as the secret elixir that could make him famous as a coach. He continued to try to get his women to take steroids. Some did and made unbelievable improvements.

On our 1972 Olympic team, I doubt there were more than four athletes who had used steroids. By 1980 there were probably no more than eight. But by now this pusher coach had shared his secret with his assistant coaches and the word for how to achieve quick success was out.

In 1983 when I heard about the USOC's pre-Olympic testing program that was allowing our athletes to find better ways to keep from being detected by official testing, I felt betrayed, like child whose parents had deserted her.

Knowing that there would be plenty of drug users who would not get caught, I sought a way to protect Evelyn and my other athletes from being accused of steroids. I called Dr. Catlin, who was in charge of the IOC, approved testing lab at UCLA, and asked them

if he would test my athletes on a regular basis and not inform us when or how often he would be asking for samples. This would, thereby, provide documentation that my athletes were clean. He seemed amused at my request, but told me that it would not be necessary. Steroid accusations were mostly for throwing events and that Evelyn would not have that kind of problem.

By 1984, out of a team of about 50 Olympians, probably 15 of them had used steroids. Some of them were medalists.

Athletes, especially those who were opposed to steroid use, afraid of their adverse side effects or simply did not want to break the rules of their sport, began to mistrust official doping controls of the IOC, USOC and TAC. Most Olympians knew of at least one athlete who had used drugs and had never been caught by testing. It became clear that with the athletic's congress and the USOC given the job of enforcing drug legislation, drug use would only escalate. It did. At least 40 percent of the women's team in Seoul had probably used steroids at sometime in their preparation for the games.

Hearing what the Russians and East Germans were using had not had the impact on me as did watching, up close and personal, the masculinization of some of our best women athletes. I was saddened to tears when I spoke to a top Olympic athlete whom I had tried to recruit as a high school girl some years before. She responded with a very deepened voice, her performances had surpassed any expectations that expert coaches had predicted for her. Only God knows what price she will have to pay. She, like some of our teammates, have sold out to the temptations of money and glory. In what is a total violation of ethics in a sport that used to be the standard, they are bankrupting us all. But I am worried about the physical and mental health of this athlete. She is now so paranoid that she carries a gun.

How can it be that the five best athletes of a prominent coach all have unusually deep voices while the voices of his less successful athletes remain unchanged?

After 29 years in sports, I can testify that women who train and compete at the highest levels do not have thickening of their vocal cords which deepens their voice, thickened facial hair and other body hair, and enlarged Adam's apple, nor clitoris, occasions of uncontrollable aggression.

No female athlete I have coached has gone for months without menstruation.

Take a closer look and listen to gold medalists: swimmer Janet Evans, skater Bonnie Blair, marathoner Joan Benoit-Samuelson, high jumper Louise Ritter, sprinters Evelyn Ashford, Wilma Rudolph, Wyomia Tyus and Chandra Cheeseborough. Though they have spent thousands of hours of hard training, none of them show evidence of the androgenic changes I have witnessed in other U.S. medal winners.

I would like to submit an article from the German magazine, Bunte. Do you have someone who——

The CHAIRMAN. Yes.

Ms. CONNOLLY. This article concurs with my statement of the affects that steroid use makes in women. Having seen these changes occur from the prolonged use of drugs in some American athletes, I believe that Drs. Donike and Bueker have a point. Athletes who

have been encouraged to use drugs by their former coaches have come to me for help. They also confirm these types of changes, as well as complain of acne, dry spotting skin and different body odor, ovarian cysts, abnormal patterns and excessive bleeding, and liver dysfunction. Some of these changes are nonreversible. Knowing these potential problems, there are doctors who are still willing to help them use steroids and pass doping controls.

In the United States, I have heard of four male coaches of top athletes who have encourage their women to use steroids. I know of no woman coach who advocates the use of male hormones.

If you think about it, giving male hormones to women athletes in order to break records is like castrating young boys to keep their soprano voices for a choir.

As I see it, the problem of drug abuse by U.S. women athletes was caused by these coaches who used the trusted athlete/coach relationship to corrupt their own athletes and the sport, as well. We must seek out and ban any coach who not only encourages, but does not discourage drug use to their athletes.

The other factor that has fostered increased drug use is that of economics. Once out of school——

The CHAIRMAN. Excuse me, Coach. Before you go on, the article that you referred to in the German magazine, and I will submit it for the record, shows a comparison of two athletes and points out——

Ms. CONNOLLY. No. It is one athlete. It is a before and after picture. Only, to my knowledge, the before was not really before——

The CHAIRMAN. I can not read German and that is incredible.

Ms. CONNOLLY. Well, I can give you——

The CHAIRMAN. I do not doubt you. I mean, it is incredible.

Ms. CONNOLLY. It is interesting that you say there were two different athletes. With all respect to the photo, one is an action shot and the other is just prior to a race. However, the points that they make, based on research that they have done over there as well, are valid. And that is what I am trying to show you.

The CHAIRMAN. Well, you showed me.

Ms. CONNOLLY. It is the same person and we have seen these changes for ourselves because we have had to deal with this. We had to do, both Evelyn and Diane have done relay passes with this person.

The CHAIRMAN. Thank you.

Ms. CONNOLLY. Anyway——

The CHAIRMAN. Sorry to break your train of thought.

Ms. CONNOLLY. That is all right. I, fortunately wrote it down.

Another problem is economics because once out of school, there is virtually no support for coaches and athletes who want to pursue Olympic goals. Only a very few top athletes get contracts from sponsors and appearance fees large enough to be banked.

So how do coaches get athletes to take such dangerous substances? They tell them everyone is doing it. Justification is the first step. Second, it is often an injury or lack of quick progress that causes frustration making the athlete more vulnerable to the entreaties of their coach. The rationale follows that they will try it only a little, but once hooked on the instant success, they take more and more.

After 15 years of complaints, TAC is finally investigating one of these coaches. But allowing the athletic congress to investigate this problem and its coaches is like asking Dracula to protect the blood bank.

We believe that only by creating a coalition of athletes who are no longer willing to stand by and watch their support disintegrate can we regain the integrity and respect that Olympic athletes once had and many still deserve.

Sports-governing bodies have been unable to stop the use of banned substances by some athletes, and in their failure, athletes who have achieved success without cheating have been maligned and assumed to be using bad substances, as well.

This situation leaves us with no role models for future generations. Young people today are beginning to believe the only way to the top is to take performance-enhancing drugs. The perception that the only crime is that of getting caught undermines the moral fiber of our entire society.

With the help of the Women's Sports Foundation, we are establishing Team Clean for men and women. A very strict, carefully monitored, voluntary testing program being completely independent of any sports-governing bodies, this program will not be susceptible to the politics of conflicting interests where athletes, in a variety of ways, are helped to avoid the embarrassment of detection.

Team Clean is an optional alternative and not meant to replace current efforts on the part of USOC, IOC, TAC and other sports federations.

Team Clean will be made available for membership to high-profile athletes and others as funds allow. Membership in Team Clean will provide an umbrella of protection for athletes who do not want to use banned substances.

As a member, an athlete's achievements will be above reproach because they will undergone such extensive testing for banned substances that no one can reasonably question their integrity.

Because membership is strictly voluntary, there will be no violation of human rights.

An athlete who is found to have used banned substances will no longer be a member of Team Clean. Their exclusion will be made public.

Team Clean does not wish to be involve in any other actions with regard to punishment.

The total health of the athletes will be our primary goal with comprehensive lab results being confidentially given back to the individual athlete and the collective data published for the benefit of all.

We have found that athletes who truly desire to see an end to the use of drugs are welcoming the opportunity to be counted as member of Team Clean. Denials, accusations and more denials have done nothing but damage our sport.

We need your support to establish Team Clean. I would rather see the millions of dollars that the new TAC drug-free program will cost be spent on research, education, and the support of nonscholastic athlete. If strict testing is done with the cooperation of athletes who want to be clean and corporate sponsorship agreements are made only with athletes in Team Clean, we will not

have to spend time and money trying to catch cheaters or determined, and probably will, avoid detection.

Believing the masculinization myth, my grandmother did not want me to compete in track and field. How tragic that today's athletes are afraid to let their daughters compete. Much like my grandmother, they are concerned about the adrogenous changes they see in some of their most successful competitors.

Male athletes have a very serious problem with drug abuse, but female athletes are on the verge of being destroyed forever. We must act now.

Thank you.

The CHAIRMAN. Thank you very much. Actually, if I may, I am going to ask you both, Miss Ashford an Miss Williams, if you would just comment, generally. Do you generally agree or disagree with the statement made by Miss Connolly?

Ms. ASHFORD. Do I agree with it?

The CHAIRMAN. Yes.

Ms. ASHFORD. Yes, 100 percent. Yes.

The CHAIRMAN. And Diane, how about you?

Ms. WILLIAMS. Yes. I agree, also, because I was a victim of steroids abuse.

The CHAIRMAN. Why don't you tell me about that if you would be willing.

Ms. WILLIAMS. OK. I have a long story.

The CHAIRMAN. I would like to hear it.

STATEMENT OF DIANE WILLIAMS

Ms. WILLIAMS. OK. September 1981 I was recruited by Mr. Chuck DeBus through a former athlete, Sandy Myers, to California shortly after I finished fifth in a 1980 U.S. Olympic trials in Eugene, OR. Chuck DeBus, who formerly coached track teams at UCLA and Cal State Northridge, offered me inducements, such as a place to reside in Los Angeles, transportation, shoe contracts and sponsorships moneys to augment my training if I would compete for the Naturite Track Club.

November 1981 I began training with the Naturite Track Club team members. Two weeks later, or around that time, Chuck DeBus would bring up in conversation about anabolic steroids, mostly during phone conversations, over lunch, or even at the practice track. I believe when he first mentioned steroids to me, he asked questions generally in this manner: Do you know what steroids are? Do you know what they look like? Do you know how they work? Chuck did not give me any written information about steroids and he strongly insisted that many of my competitors were taking them, also

The CHAIRMAN. What year was this, Diane?

Ms. WILLIAMS. November 1981.

The CHAIRMAN. Thank you.

Ms. WILLIAMS. Chuck then proceeded to explain vaguely what steroids were, not mentioning any known side effects. At that point he aroused my curiosity as he painted me a picture of success. For example, the movie-star image and fame. He would say things like I would become the world's fastest woman and Olympic gold medal-

ist and I would reap all the glorious benefits America has to offer by commercial endorsement, private endorsements, financial support from promotional activities and media attention.

I, too, wanted to be a world-class person and I know how important it is to be No. 1 in anything, in any endeavor and/or in any accomplishment. In America, no one is concerned about No. 2 or who comes in second place. They only want to know who wins. So if other world-class athletes were using steroids, why not me?

The CHAIRMAN. Did you believe they were at that time?

Ms. WILLIAMS. I believed it when he told me, yes. Chuck, he came across to me as a teacher and a mentor, so I believed in him.

In my opinion and experience at the time, Chuck DeBus is a textbook Type A personality: driven, impatient, cocky, absorbed, intolerant and sometimes abrasive or arrogant. Some people feel that DeBus is the reigning guru of American women's track. He was always interested in beating the East Germans and Russians and winning medals. DeBus consults his bible, which we call the magic workout book. It was full of exercises and carefully constructed training programs, which he assigns workouts.

So, therefore, Chuck had planned for me to compete in the indoor circuit starting in January 1982. OK. One month past, which, I guess, was in December, Chuck gave me an unmarked white plastic bottle, which I kept. This is what it is. And it had 50 to 100 pills, 100 milligrams of little blue pills. He instructed me to take two pills a day for 6 to 8 weeks, along with a protein diet which consisted of carbohydrates, pasta, fresh vegetables, fresh fruit and lots of water. After the 8-week period ended, Chuck told me to discontinue the steroids for 4 weeks. That is like the rest period to me, I believe, to figure out if they were working or not.

During the 4-week period, Chuck DeBus had no idea what kind of affects the steroid had projected on my body. So he would check my muscles by requesting me to tense up my hamstrings, my glutes, as well as my calf muscles for any kind of proof of strength. His method of muscle testing was very uncomfortable for me. I did notice, though, the amount of muscle weight gain, especially in my legs, as a direct result of taking these little blue pills.

I was able to train longer and harder, which ultimately improved my performance. Immediately I developed acne and light pigmentation on my face. I was a woman who suddenly became strong like a man.

On or about February 1982, I began to research cases concerning steroids in sports. At that time I was really concerned because I did see legitimate physical changes that occurred in my body. So I identified the name of those little blue pills as Anavar, and I got that from the "Complete Guide of Prescription and Nonprescription Drugs" by Mr. H. Winter Griffith, a medical doctor and the "Physicians Desk Reference" book I got the name of the drug and what it actually looked like

The CHAIRMAN. Up to this time you did not know what those little blue pills were? They were steroids, you thought, but you did not know anything about them?

Ms. WILLIAMS. No, I did not.

The CHAIRMAN. And you went to a doctor——

Ms. WILLIAMS. No, I did not.

The CHAIRMAN [continuing]. To ask him?

Ms. WILLIAMS. No. I went to do research at UCLA library, Cal State library, to find out information about it.

The CHAIRMAN. Thank you.

Ms. WILLIAMS. December 1982 my athletic goals of becoming the world's fastest woman and gold medalist at the 1984 Olympics games became a clear focus in my dreams as Chuck constantly reminded me to remain in contact with that success that I did hunger for. He, therefore, issued me another type of steroid called Dianabol because I believe he knew I needed a more potent substance. To paraphrase what Chuck told me at that particular time, he reassured me that by taking Dianabol, it would be like putting the icing on the cake.

Since our relationship of coach/athlete had grown more and more trustworthy, I began to take these little football-shaped pills accordingly along with the B–12 supplement called Xyaboline. After another 8-week period of steroid use, I began to experience some more serious side effects.

March 1983, although women produce their own adrogenic steroids from their adrenal glands, these are not synthesizing amounts large enough to cause masculinizing affects. Women taking anabolic steroids shift their balance of their appearance so that it resembles that of a man. I did experience and had no menstrual period, which is often suppressed. And certain masculine features appeared, like a mustache and fuzz on the chin. My clitoris, which is a penis equivalent, started to grow to embarrassing proportions. [Witness crying.]

The CHAIRMAN. Take your time. If you rather stop for a while, we can—it is hard for you to do but it makes a big difference. There are a lot of people who will listen to you.

Would you like to stop for a awhile?

Ms. WILLIAMS. Yes.

The CHAIRMAN. OK. We will stop for a while. Let me go back to asking a few questions of the other two panelists for a moment. And then when you feel like it, if you feel like it, we can go on.

Coach, your coaching years spanned from when to when?

Ms. CONNOLLY. I started coaching at Beverly Hills High School in 1970 and, actually, with a few brief breaks in between, I am still coaching.

The CHAIRMAN. And when did you start coaching at the Olympic level.

Ms. CONNOLLY. Well, actually one of my first protegees at Beverly Hills High School made a U.S. team and became a serious candidate. But at UCLA I started the first women's team because I was just a little bit ahead of Title 9 and so we were, you know really doing it the hard way. When Title 9 came in and women got scholarships and I returned to UCLA, I found Evelyn on campus there as a freshman. And she was sort of the first freshman class of Title 9, so to speak. And it was, actually, Evelyn's absolutely incredible talent that brought me back to believing that women could do it without drugs. Because I had been demoralized by what I was told in 1972 in my own career and I had the dilemma in coaching these women how am I going to reconcile this feeling that I have that you can not go to the Olympics and win a gold medal.

The CHAIRMAN. Did any of the young women you were coaching come to you and say, coach, I can not do this without steroids?

Ms. CONNOLLY. Never.

The CHAIRMAN. Were they aware of steroids?

Ms. CONNOLLY. No. There was not the awareness among women about steroids then. And I think probably knowing—because they had me for a coach and I knew about them, they got serious lectures right at the very beginning.

Ms. ASHFORD. May I interject something?

The CHAIRMAN. Yes, please.

Ms. ASHFORD. Because Pat was my coach, I knew about if I wanted to have babies—this was her big thing, having babies, being a woman. If I wanted to have babies, forget the drugs. And I never thought about taking them, anyway. But because I had the good fortune to have Pat at a very young age, at 18, and she would tell the team these things, I never thought about taking drugs.

The CHAIRMAN. So, in a sense, you were sort of vaccinated against the drug from the beginning.

Ms. ASHFORD. Yes. I had a nice vaccination, yes.

The CHAIRMAN. Let me ask you both: We have spoken about, or you have, Coach, spoken about the steroids at Olympic level. How about at the college competition level for competitors who, neither their coaches nor they, assume will be Olympians, but nonetheless, are serious about track and field? How prevalent do you think the problem exists at that level?

Ms. CONNOLLY. Well, I can only speak about women in track and field.

The CHAIRMAN. That is all I am talking about.

Ms. CONNOLLY. But essentially what happens is a athlete who shows tremendous talent, they are the ones who are encouraged to use the drugs. The other are sort of shunted off to the side and they do not understand why they are not making so much progress as the ones—and it is not just a matter of talent, because that are talented athletes who go to college where these coaches are using the drugs for some of their athletes and they never improve. So you have talented athletes going to a school and some of them make tremendous improvement and just unbelievable improvement and others do not at all. And it is partly, I guess, because the coach does not trust some of those athletes with the knowledge of what they are really doing.

But there is increasing pressure. I was very, very concerned when I heard that in the recent NCAA indoor championships there was one women's team who, where quite a few of the athletes had declared on their medical declarations that they were on cough syrup. And I just know colds get spread around, but they do not all get it at the same time. And I do not know what that could be. I do not know—I do not believe that the amphetamine affect of cough syrup is that significant and it may very well be that it is a masking agent. I do not know.

The CHAIRMAN. Evelyn, you, like Diane, have been so well-known as a phenomenal, world-class athlete—I am not looking for names—do others with whom you compete come up and ask you about drugs?

Ms. ASHFORD. You know, I can not help you there because no one has ever come up to me and asked me about drugs. Not ever. I do not know why they have not, but no one has ever done that with me, I think, because my reputation is that I just will not do it.

I have seen tremendous changes in athletes from the early days of being an athlete to the present time, tremendous changes that says to me that there is something wrong here.

The CHAIRMAN. This is a hard question to formulate, probably more difficult to ask.

If you were going to be competing next time out, feeling as you do, apparently, and the fact that you agreed with Miss Connolly's statement about the prevalence of, the degree to which world-class women athletes are using steroids or are inclined to use steroids, how would that make you feel? I mean, do you——

Ms. ASHFORD. Right now I feel despair because I have seen a tremendous change since 1984 in the way that track athletes think. I think before we had more pride in doing it the natural way. Now there is just any way it can get done, athletes will do it. I have seen a change. Since last year to now, I am just—I feel despair. I wonder what can be done. I do not think a change is going to happen within a year. I hope a change can occur before I retire as an athlete in 4 years. But at this time I just feel despair. I do not know what can be done.

The CHAIRMAN. Do you feel cheated at all?

Ms. ASHFORD. Absolutely. Absolutely.

The CHAIRMAN. Coach, and as I understand it, you said you thought there were 15 on the 1984 American Women's Track and Field Team that used steroids.

Ms. CONNOLLY. It is an estimate, yes.

The CHAIRMAN. It is an estimate. I realize that.

Did that number, in your view, go up in 1988?

Ms. CONNOLLY. Oh, yes. Oh, yes, it went up a lot. There is approximately 45 to 50 women on a team depending on how many alternates and relay people you want to take. I would say that probably, like I said, 40 percent of the 1988 team had tried it at least, maybe, 15 to 20—I am using rough figures because there is so many rumors now. Everybody says everybody is doing it and it is really hard to sit down and be very objective about it. If you listened to all the rumors, you would think the whole team was dirty. But I know that, you know, knowing that there are clean people, knowing personally people who did it without drugs that I can believe in the innocence of some of those that are questioned by others.

The CHAIRMAN. Recently Carl Lewis stated he thought that five to ten gold medalists in men's track events at the Seoul Olympics were won by athletes who used steroids. Obviously you would not know with any certainty, but do you think that is an outrageous estimate?

Ms. CONNOLLY. I am quite familiar with the men's program and the men athletes. I am married to one who testified in 1973 about this problem. So I know a little bit about it. I think Carl was low. If he was just talking about Americans, then he is probably accurate. But if you want to talk about the whole track and field program, his estimate was very low.

The CHAIRMAN. What do you think, Evelyn?

Ms. ASHFORD. I am amazed. I can not help you because I do not know anything about this stuff. For women, I know at least two. Without pointing fingers, I know two. Yes.

The CHAIRMAN. Two medalists, gold medalists?

Ms. ASHFORD. Two American women, gold medalists.

The CHAIRMAN. Would you like to continue, Diane?

Ms. WILLIAMS. Yes.

The CHAIRMAN. OK. Why don't you continue.

Ms. WILLIAMS. I was just briefly speaking about my side effects that I experienced in March of 1983. And I spoke about my clitoris, which is a penis equivalent, started to grow to embarrassing proportions. My vocal cords deepened. My vocal cords lengthened to a deeper voice. And a muscular pattern of hair growth appeared. Steroids affected my sexual behavior. In many cases I was a nymphomaniac. In women, the production of testosterone is quite low and the androgen is synthesized by the adrenal gland and is indirectly responsible for women's sex drive.

My following athletic achievements were a result of the steroids Dianabol. I am currently a collegiate record holder of women's 100 meters with the time of 10.94. I was second at the Athletic Congress National Championships in Indianapolis, June 1983. I was a bronze medalist at the first world championship in Helsinki, Finland, during the summer. I received my first major commercial endorsement with Life magazine. Last, I suffered left hamstring injury in October of 1983 after performing athletically for that endorsement. I began to panic because I believed my dreams of making the 1984 Olympic team was unreachable.

Again, Chuck DeBus supplied me with more Dianabol and furthermore, he charged me a fee of 10 cents to 25 cents a pill, depending on whatever he felt was appropriate. And at that time I had a little bit more money that I made, sponsorship money from winning the bronze medal. So he figured since I had a little bit more money, he can charge me for the drug.

From November 1983 through March 1984, after numbers of therapy treatments from Women's Training and Conditioning Center, Dr. Daley's medical office and Dr. Eek's office, my left hamstring slowly repaired at 85 percent. Mr. DeBus suggested that I visit Dr. Robert Kerr's office in San Gabriel to receive an injection of HCG, which is a human growth hormone, a steroid not banned by the IOC at the time. I met Dr. Kerr at his office and received proper patient tests, like blood pressure check, temperature, urine test and a blood test.

Shortly after——

Ms. CONNOLLY. Do you want to give him the documentation?

Ms. WILLIAMS. Yes. Well, I have the documentations here.

Shortly afterwards, I got one injection of HCG in the right hip with a long needle and the cost of that injection was $100 a week and it was like a 10-week program.

Either I had to come into Dr. Kerr's office and get the injection or I could give it myself. And I did not like needles, so I only received one injection because I could not stand needles. I just do not like them.

July 7 during the Olympic trials in Los Angeles, I placed a disappointing fourth place in the Olympic trials which allowed me a position on the women's 4x100 meter team, relay team. Unfortunately that fourth place was just a wasted dream. One week later Chuck DeBus received a phone call from the USOC, Dr. Clarke. Chuck told me to quickly phone Dr. Clarke at the drug test laboratories at UCLA. I then spoke with Dr. Clarke as he explained that my specimen A was tested positive for banned substance No. 19 on the IOC banned list. I, therefore, needed to be present to witness the testing of my specimen B urine. I reassured Dr. Clarke I would contact him within the specified time because I did not want to come down and subject myself to be present for the specimen B testing. I was very frightened and the only normal thing to do was to tell Chuck about this problem.

So I phoned him up immediately after the conversation with Dr. Clarke and I told him about my specimen A positive test. And he replied, "Well, what did you do? What did you take?" You know. And at that time I said, okay. Since I know what the problem is, what could we do about it? And he said, "I am sorry. I can not help you. I am sorry. I can not help you." I grew very disappointed and discussed it with Chuck's response and his lack of concern for me being that I was his athlete. He literally left me out in the wilderness.

The 1984 Olympic team at that time, the 1984 Olympics had a tune-up competition in Berkeley. It is called the Kinney Invitational. And I did not know who to turn to or who to talk with because I did not have any friends. I did not have anybody who knew of me because when I was training with Chuck, even from the beginning, he made sure that the athletes, his team athletes were kind of separate from each other. So it was not like when you have a group of women, you can talk over things and share ideas or whatever. So I was really pretty much isolated and that had a lot to do with the drug I was taking.

So I spoke to Cubie Seegobin and at the time he worked for Puma USA in promotions. And I gave him insight about the problem, about my specimen A positive. And he said that for me not to worry an he would speak to an attorney to represent me. And in the back of my mind I felt, okay. I have somebody who would support me and I felt kind of relieved.

After the competition I had not heard anything else from the USOC or anything at all. I remember that a week later, July 17, I received a letter from Dr. F. Don Miller and it is a confidential letter and stated that—exactly. It was addressed to me from F. Don Miller, Executive Director, United States Olympic Committee. And it says, "Dear Miss Williams, on behalf of the U.S. Olympic Committee, I am pleased to confirm to you that the analysis of your specimen B was negative for a substance banned by IOC in USOC. The results of specimen A are now negated and we have informed the Athletic Congress that your drug test at the trials was found negative. The results of some of your teammates who were found negative had been held back as well, so that your name on the final list of negatives will be among many. With all best wishes, I may remain, sincerely, F. Don Miller." And it seemed like to me

there were more than myself who were tested positive but were not revealed, or I am not sure what happened.

The CHAIRMAN. Would you mind submitting that for the record? There is no hurry for it now.

Ms. WILLIAMS. So at that point I still hoped that I could still represent the U.S. and to prove that I am not guilty because I do have a letter, an official letter from the USOC. But unfortunately, I did not get a chance to compete. The U.S. Olympic team went to Santa Barbara training camp prior to the Olympic games that year and Chuck DeBus told Mr. Brooks Johnson—Mr. Brooks Johnson was the women's manager at the time. Coach—that I was tested positive and he did not say whether it was my A sample or what. And actually Chuck said, "I did not have anything to do with that. I did not administer any drugs to her or anything like that." And I had no idea Chuck DeBus talked to Brooks Johnson. I really do not know.

So I was practicing in relay team with the other members on the team. And at that point I figured everyone else knew that I had tested positive. And they was really making sure that I did not get on the team. So I was treated very dishonestly. I was treated not fairly at all. And just left the camp and I continued training and I did not watch the Olympic games on TV. So I just went to Europe for the summer.

The CHAIRMAN. I did not watch the convention, either, so I understand.

Ms. WILLIAMS. So I went to Europe for the summer.

The CHAIRMAN. I understand your sentiment.

Ms. WILLIAMS. I went to Europe for the summer. And every competition that I ran, I was tested over in Europe, but I came up clean. It was totally clean. So I did not really get a chance to participate in the game. And all the dreams that I believed would happen to me did not happen. And I figured, you know, I was known as the invisible guinea pig. I was a guinea pig.

In all my life I have been—I guess trusted people to look out for my best interests, but that did not actually work for me. My life has completely changed after my ordeal with steroids.

The positive side of my story seems to be the ability for me to compete without ever using banned substances. Pat Connolly, coach of the 1984 Olympic champion Evelyn Ashford, became my coach after the 1984 Olympic games, which was like in December of 1984. And she has helped me to overcome my reliance on steroids.

And one of the psychological effects that I had at the time is I really believed that I could not run fast after taking steroids. I did not believe that I had the natural ability to run fast. And it was very, very difficult for me to accept that because I have really, really been brainwashed by this coach.

The CHAIRMAN. But you are still competing?

Ms. WILLIAMS. Yes, I am

The CHAIRMAN. And are you running well?

Ms. WILLIAMS. Yes. I mean, I am just trying to summarize what I was going through at that time.

The CHAIRMAN. No. I understand that, but I wanted to make the point.

Ms. WILLIAMS. OK. Yes, I am competing and I have run faster. I do believe it now, but at that time I did not.

The CHAIRMAN. And it took you a long time to get by that?

Ms. WILLIAMS. Yes. I continued to suffer from two injuries related to competition and from mental damage that occurred much deeper. It took 1 year for me to rehabilitate my back injuries and hamstring. It took 3 years to really rehabilitate my mind. In 1987 I won the TAC National Championship and was ranked in the top five in the world. Last year, in 1988, I lowered my personal best in the 100 meters to 10.86 and equaled my 200 meters of 22.60.

As a woman, as a human being and an American, I am still worried about steroid side effects that have not yet surfaced. I am greatly concerned if I will ever be able to bear a normal child. Scientific studies have linked anabolic to sterility, high blood pressure, cancer of the liver permanent masculinization in women, irreversible heart damage and dramatic mood swings. I have been experiencing some possible adverse effects such as intense itching, sore mouth, higher sex drive, depression, vaginal bleeding and, most of all, lower abdominal pain. I am still having these symptoms right now.

In February 1987 I experienced abnormal bleeding in which I had a very minor surgery. What happened was December of 1986 through January of 198 I had clots of blood. There was—it was just going out of my body. And it was like so incredible. And I did not know what was going on. But, anyway——

The CHAIRMAN. Well, let me suggest we put the remainder of your statement in the record, because I realize it is very hard to speak about all that. A lot of us plan on watching in 1992 from Barcelona and I hope we will see you there. Your willingness to come and testify here today in such explicit detail has let people know two things: One, how easy it is for a young woman with dreams to become a victim, particularly someone who possessions such phenomenal natural ability. And second, the affects of steroids on you, and the affects coming off of steroids.

Let me ask you all a couple questions and then I will not detain you much longer.

Miss Connolly, one of the things that you suggested is that any record set by an athlete previous to that time of testing positive for steroids, be stricken from the record books; is that correct?

Ms. CONNOLLY. Yes. I believe that we should get legislation through—initially through TAC and the IAAF, which is our governing body, and I suppose it could go to other sports, as well, that if an athlete tests positive at any time, all their performance records are stricken because it casts them under suspicion. And there is a number of records that would go not just held by Americans in that situation, because there have been positives in Europe by top women Europeans. They take the 18-month suspension, double up on the dosage and come back better than ever. That is the only way we can do that.

Furthermore, I would like to add at this time, while I have the opportunity, that we take out the records in the Olympic champions who we know are men. At least one of them has actually been proven to be a man who was an Olympic champion and I really do not think it is fair for her name to remain in the books.

The CHAIRMAN. What do you think about that?

Ms. ASHFORD. I think she is right. I think the strongest thing that our governing bodies can do right now is strike these world records for people such as Ben Johnson who we know tested positive. It will be very—a very strong statement from our governing body to us, to me, Evelyn Ashford, an athlete who is feeling despair right now, that they are going to do something that they are serious about cleaning up the sport. They say you can not turn back the clock and take these things from these people. I believe you can. They did it with the America's Cup. They found out this man cheated and they took the cup from America. So it can be done. It is not impossible. It can be done.

The CHAIRMAN. What about—I am sorry. Go ahead.

Ms. CONNOLLY. I was just going to say they did manage to take Jim Thorpe's medal away and give them back.

Ms. ASHFORD. So it can be done. Right now I think that is the strongest thing that can be done from the IOC.

The CHAIRMAN. Diane, what do you think should be done about coaches who are known either to have participated in suggesting the use of steroids or know they are being used and took no action? Do you think they should be banned from coaching?

Ms. WILLIAMS. Definitely I think they should be banned, because, No. 1, an athlete like myself, I trusted in a coach, which had no interest in me as person, first of all. And to manipulate me in such a way that I could take the drugs and not know what they are, and in suffering the consequences and the coach not really having anything else to say about it or abandoning me. I think that is a responsibility a coach has to have with an athlete. You know? I think they should be definitely banned and I think punitive actions should be appropriate, too.

The CHAIRMAN. Under the existing rules that govern your sport, are there any punishments that a coach is faced with if they are aware that any of their athletes are using banned substances?

Ms. CONNOLLY. Not really. Right now they are in a dilemma because the accusations have been—of Chuck DeBus, who is the coach that first approached me with the issue is the same coach who has been infesting our sport for such a long time. And now TAC is still running around trying to figure out what they are going to do with him even if they have all these allegations. It is very, very difficult. And what are they going to say? You can not come to track meets anymore? It is a very difficult situation.

I think it actually should go beyond that because my understanding of the law is that you can not distribute drugs that require prescriptions. So you are breaking the law in that regard. And it may be that some actual legal action should be brought against them from that point of view rather than leaving it just to TAC, who may or may not have been actually helping him continue his use by helping his athletes past tests from time to time.

The CHAIRMAN. Miss Williams, have you contemplated or has it been recommended to you by any legal counsel to bring a civil action against Mr. DeBus?

Ms. WILLIAMS. Well, actually in 1985 Chuck had civil action against me. He claimed that I owed him money because he promised that all these inducements to me prior to my coming to Los

Angeles in which I did have to pay him some money. And at that point I was mentally disturbed and I could not represent myself 100 percent as I wanted to with my case. He did that just to scare me. But I did try to pursue an action against him, but it just was not right. It did not work out well.

The CHAIRMAN. Well, would any of you like to make a closing comment?

Ms. ASHFORD. I would like to say something.

The CHAIRMAN. Yes.

Ms. ASHFORD. I just want everybody to know that it can be achieved. If you have the talent, hard work and a dedication to what you want to do, it can be achieved. This is a very negative thing that is happening to the sport, to track. But I think it can turn around to be a positive thing. And this is a revelation to me what happened to Diane. I have always thought that, especially women, become victims of their coaches because a coach/athlete relationship is very close. I think in some cases during your training, you are closer to your coach than anybody because they can help you visualize your dream. So that relationship is almost sacred in some ways. So a coach can, if he is inclined to want to cheat, can sway you. So in some ways I think the coach is very much responsible, probably more so than the athlete. And the way our laws are now in the sport, the athlete is the only one who suffers the consequence. And I think the law should be changed so that the coach has to suffer along with the athlete.

And I think doctors need to come into this because now you can not do it, I understand, you can not do it unless you are monitored by a doctor. And the doctors are doing it for money. There is just no—$100 an injection? Come on. They are not doing it for the good of the sport. They are doing it to make money. So I think there should be some laws. Something has to be done to penalize the doctor, then the coach, and then if the IOC and the USOC and TAC and all these letters, these people, are just turning their head the other way, they should be penalized, too, in some way, monetarily in some way.

That is all I have to say.

The CHAIRMAN. Well, that is a lot. That is important.

Ms. ASHFORD. Excuse me. It upsets me to be an athlete who has never thought about doing this thing and to have to come here and testify because it is so—I guess the word I am looking for insidious. I do not know. It upsets me to have to come here and testify on this matter because track has always been pure to me. It is the Wheaties box. Come on. It has always been a sport where their hero is you either win or you lose. And it is just clear-cut to me. This is not clear-cut. It is cheating. And I think it goes further than just track. It is our society that has got a problem, a serious problem. My daughter will not be running track. I might just take her and put her in a box somewhere and do not let her come out. We have got a serious problem. And I do not know if you can help us, but we need help. And the more I hear by talking to doctors and people who know what is going on, they do not care. I just do not feel anybody cares because we are a small group of people. Nobody cares about us. So it is going to keep going on and on and I want to run for 4 more years. And it is going to be there in 4 years.

It is probably going to be everybody on that track with the exception of me—I hope I can make it to the final. I went off. I am sorry.

Ms. WILLIAMS. I would like to say, based on my experience, I went to my hometown, Chicago, about 3 weeks ago to do a speaking engagement in my high school. And I just spoke about mental preparation for students, physical preparation, all the things that it takes to be a champion outside of my drug abuse use. I did not really want to mention that because I did not think it was appropriate at the time. But a young lady, she was like 15 years old, she came up to me and she said, do I know Florence Griffith-Joiner. And I said, "Yes." And she said, do I think she takes steroids? I said, "No." And she said, "Well, I would like to take steroids and look like her and to be fast like her and strong like her."

Ms. ASHFORD. You see what I mean?

Ms. WILLIAMS. And that really hit me. Because figured this young lady, in order for her to win and to be successful at her age, 15, she wants to take drugs. So to her it is okay to take drugs. And she is been told it is okay to take drugs.

So I had to relate my experience to her. And I am not sure if I shed any light in her life. So that is where I come in at. I want to be the role model for younger people, to let them know, hey, you know, do not go through the same routine or the same road that I have taken because it really did not help me at all. It really put me back several years of knowing if I can run faster than now. I have not even reaped any benefits of being an Olympic gold medalist or being an Olympian. I have not even experienced that. I do not even know what that is all about.

So I figure, there has to be some changes, like I have already mentioned. There has to be punitive action. There has to be something, some kinds of laws that will protect us, protect the innocent. Not to protect the guilty because they are out there and it is getting worse. And they start in our communities, the young communities.

The CHAIRMAN. Miss Connolly, do you think that the governing bodies in your sport care?

Ms. CONNOLLY. Not really. I have been introducing legislation over the years. If some of the legislation that I had originally introduced in its original form had not been watered down and subterfuged in its implementation, we might not have had the results in Seoul that we did. But as a matter of fact, I called it a protective testing committee, protective testing team and this was to implement random testing throughout the track meets.

The CHAIRMAN. Throughout the year?

Ms. CONNOLLY. Throughout the year. And no one was to know. No one was to know when—what meets would be tested. But as soon as the big track meet started, the athletes were knowing not only what meets there was going to be testing, but they were knowing which events would be tested at that meet so they could avoid those meets. And there were only two or three people that could have had that information and they are our biggest leaders.

The CHAIRMAN. Last question I have for you. In your opinion, Miss Connolly, why do you think the governing bodies of this country are unwilling to do what you think, which you state they are

unwilling to do? Is it because they think if they do, they will not be able to compete internationally?

Ms. CONNOLLY. No. It is strictly a matter of dollars. Track and field has been a minor sport. And as professional sports have got a bigger and bigger piece of the American dollar, track and field has just slipped into nowhere. We could not even hardly afford to outfit our teams. We had to try to generate income and they have had to do it with TV contracts, corporate sponsorships and the ticket sales of big meets and promotions. The things that sell TV are world records, big performances, get us, you know, ticket sales for competitions and so forth. There was absolutely no way, and I knew it because I sat in on some L.A. organization committee meetings. In fact, they said in one pre-Olympic meeting that it would not bother to ban anybody for testosterone even though it was in the rules because too much litigation might come out of it. Well, it is just they could not have anything bad, anything ugly. None of the athletes that were tested positive in the U.S. Olympic trials or in the Olympic games were medalists. Isn't it funny how it is only the ones who are not doing well that are cheating?

The CHAIRMAN. If you had my job, if you were sitting here and you chaired this committee, who would you ask to come before this committee to testify about the rules of the governing? Who in the governing bodies would you call?

Ms. CONNOLLY. Do you have a pencil?

The CHAIRMAN. Well, as a matter of fact, I have got more than a pencil. I got probably the fastest pencil in the East right to my right and your left.

Ms. CONNOLLY. I would insist that you put them under oath because even that has not helped Charlie Francis. But in any case, they would need to be under oath. And you need to start with Olen Castle and Bernie Wagner and Harmon Brown. And that ought to open up enough worms that you get some more names.

The CHAIRMAN. Anyone else have anything to say? [No response.]

Ms. CONNOLLY. Dr. Voy, too. Yes. Dr. Voy who just retired from the USOC. He seems to have problems continuing with the association. We should know publicly what those problems are.

The CHAIRMAN. Well, I can not tell you how much I appreciate your willingness to come here from three different yet similar prospectives. They are all great athletes, but each with a view slightly different from the other.

And Miss Williams, particularly for your willingness to share a very difficult story with us.

And you, Miss Ashford, for having the good sense and the good fortune and the good coaching to——

Ms. ASHFORD. I could not help you, really. I am sorry.

The CHAIRMAN. No. You helped us a great deal. As I said, this is not so much an investigative committee. We are not out looking to hang anybody. We are out trying to learn the facts so that more of those 15-year-old girls do not come up to the Diane Williamses of the world and say, "I want to use steroids because I want to be like or I want to look like another athlete" whether or not that athlete uses steroids.

So I thank you very much for taking the time. It was difficult for you to get here and you spent a lot of time with us. And it is some-

thing that we appreciate and will not forget. I mean that sincerely. And I look forward to seeing you both compete in Barcelona, Spain.

Ms. WILLIAMS. Thank you.

The CHAIRMAN. Thank you very, very much. Thank you.

Ms. WILLIAMS. Thank you for having me.

The CHAIRMAN. We are going to take a brief recess while we change the tape.

[Recess.]

[Prepared statement of Pat Winslow Connolly follows:]

SENATE JUDICIARY COMMITTEE HEARING
APRIL 3, 1989
PAT WINSLOW CONNOLLY

ADMITTED CANADIAN DRUG-USERS, FRANCIS AND ISSAJENKO, HAVE ACCUSSED ME, AS AN ATHLETE AND COACH, OF USING STEROIDS. FOR THOSE PEOPLE WHO KNOW ME AND HAVE PUBLICALLY DEFENDED ME, THE CANADIANS' FALSE ALLEGATIONS SEEM LUDICROUS. BUT I AM FAMILIAR WITH THIS SELF SERVING LOGIC. DRUG USERS IN THE U.S. HAVE ALWAYS CLAIMED THAT EVERYONE IS USING DRUGS TO JUSTIFY THEIR OWN GUILT.

FRANCIS OBVIOUSLY DOESN'T KNOW ANYTHING ABOUT ME BECAUSE MY OWN, VERIFIABLE STORY SPEAKS FOR ITSELF AS WELL AS ANSWERS THE QUESTIONS THAT YOU HAVE ASKED ME TO ADDRESS.

FOR THE PURPOSE OF THIS TESTIMONY REFERENCES TO TEAM MEAN UNITED STATES WOMEN'S TRACK AND FIELD TEAMS.

ON MY FIRST TWO OLYMPIC TEAMS IN 1960 AND '64 WE (WOMEN) DID NOT KNOW WHAT PERFORMANCE ENHANCING DRUGS WERE. WE HAD A DIFFERENT PROBLEM ... THERE WERE MEN, POSING AS WOMEN, WHO WERE COMPETING AND SETTING RECORDS IN WOMEN'S EVENTS.

IT WAS NO WONDER MY GRANDMOTHER AND OTHERS TRIED TO DISUADE MY MOTHER FROM LETTING ME RUN TRACK. THEY WERE AFRAID THAT MY COMPETING IN THE OLYMPICS WOULD TURN ME INTO ONE OF THE MASCULINE FREAKS. I WAS TOLD I WOULD NEVER BE ABLE TO HAVE BABIES IF I TRAINED THAT HARD. I SET OUT TO PROVE THEIR WORRIES WERE UNFOUNDED... THE EXHILARATION OF RUNNING AND JUMPING, LITERALLY AROUND THE WORLD, WAS JUST TOO MUCH FUN.

I GOT MARRIED IN 1963 AND HAD A BABY IN 1966. I WAS EAGER TO DISPROVE THE MYTH ABOUT WOMEN ATHLETES. I NURSED MY FOUR MONTH OLD SON IN BETWEEN EVENTS OF MY FIFTH NATIONAL PENTATHLON CHAMPIONSHIP. I WON, NOT ONLY THE TITLE BUT PEOPLE WERE BEGINNING TO BELIEVE THAT HARD TRAINING AND COMPETITION DID NOT MASCULINIZE WOMEN.

IN 1967 AT THE PAN AMERICAN GAMES IN CANADA WE HAD TO TAKE A VERY EMBARASSING SEX TEST. WE COMPLIED WITH THE TEST HAPPY THAT AT LAST, THE MEN WOULD BE ELIMINATED FROM OUR COMPETITIONS.

BY THE 1968 OLYMPIC GAMES IN IN MEXICO CITY WE HAD TO BE RETESTED BY CHROMOSOME ANALYSIS OF CELLS SCRAPED FROM OUR CHEEKS. HERMAPHRODITES (WOMEN WITH A CHROMOSOME ANOMALY THAT GIVES THEM A HORMONAL MALE LIKE ADVANTAGE) WOULD NOW BE ELIMINATED FROM THE WOMEN'S EVENTS AND WE WOULD BE FREE TO COMPETE ONLY AGAINST OTHER NATURAL WOMEN.

WHAT MOST OF US DIDN'T KNOW THEN, BUT HAVE SINCE DISCOVERED WAS THAT SOME OF OUR EUROPEAN COMPETITORS WERE TAKING MALE HORMONES TO ENHANCE THEIR PERFORMANCES. THE DOSES THEY WERE THEN TAKING, BY TODAY'S STANDARDS, WERE SO LOW THAT THERE WERE NO OBVIOUS CHANGES IN THEIR PHYSICAL APPEARANCE.

AMERICAN WOMEN WERE ALWAYS GETTING THE BAD RAP BECAUSE WE WERE CONSTANTLY TROUNCED IN INTERNATIONAL MEETS BY OUR EUROPEAN AND SOVIET COUNTERPARTS.

BUT I KNEW NO ONE ON OUR TEAMS WHO HAD USED MALE HORMONES. WE WERE PROUD OF OUR ATHLETIC PROWESS AND OUR FEMINITY.

IN MY PREPARATION FOR THE MUNICH OLYMPICS I WAS TOLD BY A COACH, THAT I DIDN'T HAVE A CHANCE TO WIN A MEDAL IF I DIDN'T USE STEROIDS. WHEN HE EXPLAINED WHAT THEY WERE I WAS DEVASTATED. THOUGH I WAS STILL THE NUMBER ONE AMERICAN I DIDN'T EVEN GO TO THE OLYMPIC TRIALS. NO WAY WAS I GOING TO TURN MY SELF INTO A MAN, I WANTED MORE CHILDREN.

THIS COACH DIDN'T GIVE UP. IT APPEARED TO ME THAT HE SAW STEROIDS AS THE SECRET ELIXIR THAT COULD MAKE HIM FAMOUS AS A COACH. HE CONTINUED TO TRY TO GET HIS WOMEN TO TAKE STEROIDS. SOME DID AND MADE UNBELIEVABLE IMPROVEMENTS.

ON OUR 1972 OLYMPIC TEAM I DOUBT THERE WERE MORE THAN 4 ATHLETES WHO HAD USED STEROIDS. BY 1980 THERE WERE PROBABLY NO MORE THAN 8. BUT BY NOW THIS PUSHER/COACH HAD SHARED HIS SECRET WITH HIS ASSISTANT COACHES AND THE WORD FOR HOW TO ACHIEVE QUICK SUCCESS WAS OUT.

IN 1983 WHEN I HEARD ABOUT THE USOC'S PRE-OLYMPIC TESTING PROGRAM THAT WAS ALLOWING OUR ATHLETES TO FIND BETTER WAYS TO KEEP FROM BEING DETECTED BY OFFICIAL TESTING, I FELT BETRAYED - LIKE A CHILD WHOSE PARENTS HAD DESERTED HER.

KNOWING THAT THERE WOULD BE PLENTY OF DRUG USERS WHO WOULD NOT GET CAUGHT I SOUGHT A WAY TO PROTECT EVELYN AND MY OTHER ATHLETES FROM BEING ACCUSED OF USING STEROIDS. I CALLED DR. CATLIN WHO WAS IN CHARGE OF THE IOC APPROVED TESING LAB AT UCLA AND ASKED HIM IF HE WOULD TEST MY ATHLETES ON A REGULAR BASIS AND NOT INFORM US OF WHEN OR HOW OFTEN HE WOULD BE ASKING FOR SAMPLES. THIS WOULD THEREBY PROVIDE DOCUMENTATION THAT MY ATHLETES WERE CLEAN. HE SEEMED AMUSED AT MY REQUEST BUT TOLD ME THAT IT WOULDN'T BE NECESSARY. STEROID ACCUSATIONS WERE MOSTLY FOR THROWING EVENTS AND THAT EVELYN WOULD NOT HAVE THAT KIND OF PROBLEM.

BY 1984 OUT OF A TEAM OF ABOUT 50 OLYMPIANS PROBABLY 15 OF THEM HAD USED STEROIDS, SOME OF THEM WERE MEDALISTS.

ATHLETES, ESPECIALLY THOSE WHO WERE OPPOSED TO STEROID USE, AFRAID OF THE ADVERSE SIDE EFFECTS OR SIMPLY DIDN'T WANT TO BREAK THE RULES OF THEIR SPORT, BEGAN TO MISTRUST OFFICIAL DOPING CONTROLS OF THE IOC, USOC AND TAC. MOST OLYMPIANS KNEW OF AT LEAST ONE ATHLETE WHO HAD USED DRUGS AND HAD NEVER BEEN CAUGHT BY TESTING. IT BECAME CLEAR THAT WITH THE ATHLETICS CONGRESS AND USOC GIVEN THE JOB OF ENFORCING DRUG LEGISLATION, DRUG USE WOULD ONLY ESCALATE. IT DID! AT LEAST 40 PERCENT OF THE WOMEN'S TEAM IN SEOUL HAD PROBABLY USED STEROIDS AT SOME TIME IN THEIR PREPARATION FOR THE GAMES.

HEARING WHAT THE RUSSIANS AND EAST GERMANS WERE USING HAD NOT HAD THE IMPACT ON ME AS DID WATCHING, UP CLOSE AND PERSONAL, THE MASCULINIZATION OF SOME OF OUR BEST WOMEN ATHLETES. I WAS SADDENED TO TEARS WHEN I SPOKE TO A TOP OLYMPIC ATHLETE WHOM I HAD TRIED TO RECRUIT AS A HIGH SCHOOL GIRL SOME YEARS BEFORE. SHE RESPONDED WITH A VERY DEEPENED VOICE. HER PERFROMANCES HAD SURPASSED ANY EXPECTATIONS THAT EXPERT COACHES HAD PREDICTED FOR HER. ONLY GOD KNOWS WHAT PRICE SHE WILL HAVE TO PAY. SHE, LIKE SOME OF HER TEAMMATES, HAS SOLD OUT TO THE TEMPTATIONS OF MONEY AND GLORY. IN WHAT IS A TOTAL VIOLATION OF ETHICS IN A SPORT THAT USED TO

SET THE STANDARD, THEY ARE BANKRUPTING US ALL. BUT I AM WORRIED ABOUT THE PHYSICAL AND MENTAL HEALTH OF THIS ATHLETE. SHE IS NOW SO PARANOID THAT SHE CARRIES A GUN.

HOW CAN IT BE THAT THE FIVE BEST ATHLETES OF A PROMINENT COACH ALL HAVE UNUSUALLY DEEP VOICES WHILE THE VOICES OF HIS LESS SUCCESSFUL ATHLETES REMAIN UNCHANGED?

AFTER 29 YEARS IN SPORTS I CAN TESTIFY THAT WOMEN WHO TRAIN AND COMPETE AT THE HIGHEST LEVELS DO NOT HAVE:

- THICKENING OF THEIR VOCAL CHORDS WHICH DEEPENS THEIR VOICE

- THICKENED FACIAL AND OTHER BODY HAIR

- AN ENLARGED ADAM'S APPLE NOR CLITORIS

- OCCASIONS OF UNCONTROLLABLE AGGRESION

NO FEMALE ATHLETE I HAVE COACHED HAS GONE FOR MONTHS WITHOUT MENSTRUATING.

TAKE A CLOSE LOOK AT AND LISTEN TO GOLD MEDALISTS- SWIMMER JANET EVANS, SKATER BONNIE BLAIR, MARATHONER JOAN BENOIT-SAMUELSON, HIGH JUMPER LOUISE RITTER, SPRINTERS - EVELYN ASHFORD, WILMA RUDOLPH, WYOMIA TYUS AND CHANDRA CHEESEBOROUGH. THOUGH THEY HAVE SPENT THOUSANDS OF HOURS OF HARD TRAINING NONE OF THEM SHOW EVIDENCE OF THE ANDROGENIC CHANGES I HAVE WITNESSED IN OTHER U.S. MEDAL WINNERS.

I WOULD LIKE TO SUBMITT AN ARTICLE FROM THE GERMAN MAGAZINE, BUNTE, THAT CONCURS WITH MY STATEMENT OF THE EFFECTS THAT STEROID USE MAKES IN WOMEN. HAVING SEEN THESE CHANGES OCCUR FROM PROLONGED USE OF DRUGS IN SOME AMERICAN ATHLETES, I BELIEVE THAT DOCTORS DONIKE AND BEUKER HAVE A POINT. ATHLETES WHO HAVE BEEN ENCOURAGED TO USE DRUGS BY THEIR FORMER COACHES HAVE COME TO ME FOR HELP. THEY ALSO CONFIRM THESE TYPES OF CHANGES AS WELL AS COMPLAIN OF ACNE, DRY SPOTTY SKIN, AND DIFFERENT BODY ODOR, OVARIAN CYSTS, ABNORMAL PATTERS OF AND EXCESSIVE BLEEDING AND LIVER DYSFUNCTION. SOME OF THESE CHANGES ARE NON-REVERSABLE. KNOWING THESE POTENTIAL PROBLEMS THERE ARE DOCTORS WHO ARE STILL WILLING TO HELP THEM USE STEROIDS AND PASS DOPING CONTROLS.

IN THE UNITED STATES I HAVE HEARD OF FOUR MALE COACHES OF TOP ATHLETES WHO HAVE ENCOURAGED THEIR WOMEN ATHLETES TO USE STEROIDS. I KNOW OF NO WOMAN COACH WHO ADVOCATES THE USE OF MALE HORMONES.

IF YOU THINK ABOUT IT, GIVING MALE HORMONES TO WOMEN ATHLETES IN ORDER TO BREAK RECORDS IS LIKE CASTRATING YOUNG BOYS TO KEEP THEIR SOPRANO VOICES FOR A CHOIR.

AS I SEE IT, THE PROBLEM OF DRUG ABUSE BY U.S. WOMEN ATHLETES WAS CAUSED BY THESE COACHES WHO USED THE TRUSTED ATHLETE/COACH RELATIONSHIP TO CORRUPT THEIR OWN ATHLETES AND THE SPORT AS WELL. WE MUST SEEK OUT AND BAN ANY COACH WHO NOT ONLY ENCOURAGES BUT DOES NOT DISCOURAGE DRUG USE TO THEIR ATHLETES.

THE OTHER FACTOR THAT HAS FOSTERED INCREASED DRUG USE IS THAT OF

ECONOMICS. ONCE OUT OF SCHOOL THERE IS VIRTUALLY NO SUPPORT FOR COACHES AND ATHLETES WHO WANT TO PERSUE OLYMPIC GOALS. ONLY A VERY FEW TOP ATHLETES GET CONTRACTS FROM SPONSORS AND APPEARANCES FEES LARGE ENOUGH TO BE BANKED.

HOW DO COACHES GET ATHLETES TO TAKE SUCH DANGEROUS SUBSTANCES? THEY TELL THEM EVERYONE IS DOING IT. JUSTIFICATION IS THE FIRST STEP. SECOND, IT IS OFTEN AN INJURY OR LACK OF QUICK PROGRESS THAT CAUSES FRUSTRATION, MAKING THE ATHLETE MORE VULNERABLE TO THE ENTREATIES OF THEIR COACH. THE RATIONALE FOLLOWS THAT THEY WILL TRY IT ONLY A LITTLE. BUT ONCE HOOKED ON THE INSTANT SUCCESS AND THE FEELING OF INVINCIBILITY THEY TAKE MORE AND MORE.

AFTER FIFTEEN YEARS OF COMPLAINTS TAC IS FINALLY INVESTIGATING ONE OF THESE COACHES. BUT ALLOWING THE ATHLETIC CONGRESS TO INVESTIGATE THIS PROBLEM AND ITS COACHES IS LIKE ASKING DRACULA TO PROTECT THE BLOOD BANK.

WE BELIEVE that only by creating a coalition of athletes, who are no longer willing to stand by and watch their sport disintegrate, can we regain the integrety and respect that Olympic athletes once had and many still deserve.

Sports governing bodies have been unable to stop the use of banned substances by some athletes, and in their failure athletes who have achieved success without cheating, have been maligned and assumed to be using banned substances as well.

This situation leaves us with no role models for future generations. Young people today are begining to believe the only way to the top is to take performance enhancing drugs. Their perception that the only crime is that of getting caught, undermines the moral fiber of our entire society.

With the help of the Women's Sports Foundation we are establishing TEAM CLEAN, FOR MEN AND WOMEN - a very strict, carefully monitored voluntary testing program. Being completely independent of any sports governing bodies, this program won't be susceptible to the politics of conflicting interests where athletes, in a variety of ways, are helped to avoid the embarrassment of detection.

Team Clean is an opptional alternative and not meant to replace current efforts on the part of the USOC, IOC, TAC and other sport federations.

Team Clean will be made available for membership to high profile athletes and others as funds allow. Membership in TEAM CLEAN will provide an umbrella of protection for athletes who do not want to use banned substances. As a member, an athlete's achievements will be above reproach because they will have undergone such extensive testing for banned substances that no one can reasonably question their integrety.

Because membership is strictly voluntary, there will be no violation of human rights.

An athlete who is found to have used a banned substance will no longer be a member of TEAM CLEAN. Their exclusion will be made public.

TEAM CLEAN does not wish to be involved in any other actions with regard

to punishment.

THE TOTAL HEALTH OF THE ATHLETES WILL BE OUR PRIMARY GOAL WITH COMPREHENSIVE LAB RESULTS BEING CONFIDENTIALLY GIVEN BACK TO THE INDIVIDUAL ATHLETE AND THE COLLECTIVE DATA PUBLISHED FOR THE BENEFIT OF ALL.

We have found that athletes who truly desire to see an end to the use of drugs are welcoming the opportunity to be counted as a member of TEAM CLEAN. Denials, accusations and more denials have done nothing but dammage our sport.

WE NEED YOUR SUPPORT TO ESTABLISH TEAM CLEAN. I WOULD RATHER SEE THE MILLIONS OF DOLLARS THAT THE NEW TAC DRUG-FREE PROGRAM WILL COST, BE SPENT ON RESEARCH, EDUCATION AND SUPPORT OF THE NON-SCHOLASTIC ATHLETE. IF STRICT TESTING IS DONE WITH THE COOPERATION OF ATHLETES WHO WANT TO BE CLEAN, AND, CORPORATE SPONSORSHIP AGREEMENTS ARE MADE ONLY WITH ATHLETES IN TEAM CLEAN, WE WON'T HAVE TO SPEND TIME AND MONEY TRYING TO CATCH CHEATERS WHO ARE DETERMINED AND PROBABLY WILL AVOID DETECTION.

BELIEVING THE MASCULINIZATION MYTH, MY GRANDMOTHER DIDN'T WANT ME TO COMPETE IN TRACK AND FIELD. HOW TRAGIC THAT TODAY'S ATHLETES ARE AFRAID TO LET THEIR DAUGHTERS COMPETE. MUCH LIKE MY GRANDMOTHER, THEY ARE CONCERNED ABOUT THE ANDROGENOUS CHANGES THEY SEE IN SOME OF THEIR MOST SUCCESSFUL COMPETITORS.

MALE ATHLETES HAVE A SERIOUS PROBLEM WITH DRUG ABUSE BUT FEMALE ATHLETES ARE ON THE VERGE OF BEING DESTROYED FOREVER. WE MUST ACT NOW!

THANK YOU.

The CHAIRMAN. The hearing will come to order. Our next panel of witnesses will be Pat Croce, a conditioning trainer for the Philadelphia 76ers, the Philadelphia Flyers, and Mike Schmidt of the Philadelphia Phillies. And also a two-time national karate champion. Mike Quick, captain of the Philadelphia Eagles and five-time All-Pro wide receiver. Otho Davis, head trainer of the Philadelphia Eagles; executive trainer of the National Athletic Trainers Association. And Dorothy Baker, a member of the Executive Board of the U.S. Olympic committee and a resident of Wilmington, DE, and a friend. And I welcome you all.

Do any of you have an opening statement that you would like to make?

Pat, why don't you begin with your statement.

STATEMENT OF PAT CROCE, CONDITIONING TRAINER, PHILADELPHIA 76ERS, PHILADELPHIA FLYERS; MIKE SCHMIDT, PHILADELPHIA PHILLIES; MIKE QUICK, CAPTAIN, PHILADELPHIA EAGLES; OTHO DAVIS, HEAD TRAINER, PHILADELPHIA EAGLES; EXECUTIVE TRAINER, NATIONAL ATHLETIC TRAINERS ASSOCIATION; DOROTHY BAKER, MEMBER, EXECUTIVE BOARD, U.S. OLYMPIC COMMITTEE

Mr. CROCE. Chairman Biden, as a physical therapist and physical conditioning coach for the Philadelphia Flyers hockey team, Philadelphia 76ers basketball team, and such superior professional athletes as the Philadelphia Phillies all-star third baseman Mike Schmidt and the IBF Junior Welterweight boxing champion Meldrick Taylor, I can attest to the fact and agree with Evelyn Ashford that you can make it in competitive sports and be a winner without anabolic-androgenic steroids. To my knowledge, not one of the professional athletes under my care ingests or injects anabolic steroids.

With regard to the general population, especially high school and college-age individuals, the use of anabolic steroids in males interested in looking good, not just performing better, but looking good, is as prevalent as the condition of anorexia in females. Body beautiful is "in" and steroids are a quick and effective means of obtaining a larger, leaner look.

And there lies the problem. Steroids do work, provided you eat and strength train properly. And yes, they do have serious side effects: lower HDL cholesterol, increased hypertension, increased risk of liver and kidney tumors. But what our young studs and studettes do not see, they do not believe. The fact steroids are not illegal encourages their acceptance by susceptible individuals.

As it is finally a felony to traffic anabolic steroids, thanks to you, there must also be punishment and negative connotation with their usage. Anabolic steroids must be considered a controlled substance, no different than cocaine. Steroids, cocaine; the same connotation.

Let us not get behind the eightball. Our youth must be educated on the physiological and psychological effects of anabolic steroids, and more importantly, that there are safe and effective alternatives available. Ross Laboratories of Columbus, OH, has pioneered this mission across the United States by providing to high school, college and professional teams a well-received educational video en-

titled, "Champions At Any Cost." Let us make the message informative, make the message action-packed. Let us make the message mandatory.

Thank you.

The CHAIRMAN. Thank you.

Does anyone else have an opening statement?

STATEMENT OF OTHO DAVIS

Mr. DAVIS. Senator, as a representative of the Philadelphia Eagles and 12,000 members of the National Athletic Trainers Association, I would like to enter part of a Non-Therapeutic Use of Drugs statement by the National Athletic Trainers Association.

The question of use and misuse of drug in sports is received, and undoubtedly will continue to receive, considerable public attention and journalistic treatment. Since the role of the athletic trainer falls within this question, the National Athletic Trainers Association desires to emphasize its complete condemnation of the use of ergogenic aids, particularly stimulants, depressants and anabolic steroids in an attempt to gain advantages in sports performances. The misuse and abuse of drugs by an athlete not only presents to his potential significant hazards, but it also raises a cloud of controversy over legitimate and constructive use of medications and drugs in athletes. It further produces, especially among the young, misconceptions instead of insights into sports—demonstrated principles of healthful living. There is no place in athletics for the substitution of drugs for hard work and the healthy habits of proper rest and proper diet.

This is part of a statement that was entered and approved by the Board of Directors of the N.A.T.A. in June of 1968. So you can see that the athletic trainer, at a very early year, had a concern about the use of ergogenic aids and it falls the fact that it is still in process.

Next item I would like to present at this time will be a letter by Mr. Pete Rozelle, Commissioner of the National Football League, and this letter is being distributed to all players in the NFL.

"This will advise you of the NFL policy for 1989 regarding anabolic steroids and related substances."

"Past NFL drug policy has condemned and prohibited the use of these substances, and educational information has been provided as well. There is now a substantial consequence on several key points, that steroids can give a competitive advantage to athletes who use them; that steroids may increase the risk of injury, both to the user and to other players; and that steroids may result in other very significant health risks, both in the short run and in years to run. I am quite concerned about both the competitive aspects and the implications of steroid use for the health and welfare of players an their families."

"The use of anabolic steroids and related substances constitutes, in my judgment, conduct detrimental to the National Football League. It is clearly detrimental to the integrity of professional football and to public confidence in it."

"All NFL players will be tested for anabolic steroids and related substances, and for masking agents used to try to suppress their

detection, in 1989 pre-season training camps. If you are or have been taking any of the masking agents, you must, at the time of your pre-season training camp test, declare that fact and supply an appropriate written explanation from your physician; if you do not do so, a positive result for any masking agent will be treated as positive for a banned steroid and carry the same consequences."

"The combination of health and safety risks and competitive advantage on the playing field distinguishes steroid use from the use of so-called street drugs and from alcohol abuse. Accordingly, a positive pre-season test this year will result in your being removed from your club's training facility, placed on Reserve/Non-Football Illness, and prohibited from any further participation with the club for a minimum of 30 days from the time you are advised of the test result, or until your system is shown to be clear of steroids and/or masking agents, whichever is later."

"A positive test will also mean that you will be subject to frequent reasonable-cause testing in the future, as players who have previously tested positive already are. If you again test positive this year for steroids or related drugs, or for a masking agent, you will be suspended for the rest of the season, including any postseason play."

"Please be guided by this information and avoid the adverse risks and consequences, to yourself and others, that steroid use entails."

"Sincerely, Pete Rozelle, Commissioner."

[The prepared statement and letter referred to follow:]

OTHO DAVIS

POLICY 1

NON-THERAPUTIC USE OF DRUGS

STATEMENT OF THE NATIONAL ATHLETIC TRAINERS' ASSOCIATION

Under authority of, and by direction of, the Board of Directors of the National Athletic Trainers' Association (N.A.T.A.), the following statement of policy is issued.

The question of use and misuse of drugs in sports has received, and undoubtedly will continue to receive, considerable public attention and journalistic treatment. Since the role of the Athletic Trainer falls within this question, the National Athletic Trainers' Association desires to emphasize its complete condemnation of the use of ergogenic aids — particularly stimulants, depressants, and anabolic steroids — in attempts to gain advantage in sports performances. The misuse and abuse of drugs by an athlete not only presents to him potentially significant hazards for dubious gains — it also raises a cloud of controversy over legitimate and constructive use of medications and drugs in athletics. It further produces, especially among the emulating public, misconceptions instead of insights into sports — demonstrated principles of healthful living. There is no place in athletics for the substitution of drugs for hard work and the healthy habits of proper rest and proper diet.

The N.A.T.A. reaffirms its stand that it will cooperate with all agencies and organizations who are attempting, through research, to develop techniques of monitoring athletes in competition. Hopefully this will not become a necessity. We feel that accurate, meaningful education of athletes and their leaders, relying on ethical instead of legal conduct for controls, is a much better objective and more realistic solution to the problem. To this end, the N.A.T.A. has utilized various means available to it as an organization.

In 1962, N.A.T.A. endorsed the AMA's Bill of Rights for the Athlete, which is anchored in responsible health supervision of athletics. The N.A.T.A. maintains active representation on the Joint Commission on Competitive Safeguards and Medical Aspects of Sports, which recommends rule changes and additions concerning the health and safety of the high school and collegiate athlete.

The N.A.T.A. currently is co-sponsoring with the AMA and the Athletic Institute a manual on the fundamentals of athletic training, which is designed to help personnel in schools presently unable to obtain the services of a Certified Athletic Trainer.

The N.A.T.A. Committee on Ethics has the function and duty to investigate any reported violation of ethical practices by an athletic trainer, which includes provision or use of drugs other than those required for therapeutic treatment and administered by or under the supervision of a physician. Any athletic trainer found guilty of violation of these ethical practices will be subject to expulsion from the N.A.T.A., and whatever further action is provided for by the law.

The athletic trainer has been commended by the American Medical Association (House of Delegates Resolution, 1967) for his strategic professional role in protecting and promoting the health of active youth. The N.A.T.A. re-pledges its ongoing professional preparation, continuing education, and cooperative liaison programs for serving this role effectively, with particular attention to drug education.

Approved by the Board of Directors
June, 1968
Houston, Texas

THE NATIONAL FOOTBALL LEAGUE

410 PARK AVENUE, NEW YORK, N.Y. 10022 • (212) 758-1500

Re: Steroids

Dear Player:

This will advise you of NFL policy for 1989 regarding anabolic steroids and related substances.

Past NFL drug policy has condemned and prohibited the use of these substances, and educational information has been provided as well. There is now a substantial consensus on several key points: (1) that steroids can give a competitive advantage to athletes who use them; (2) that steroid use may increase the risk of injuries both to the user and to other players; and (3) that steroids may result in other very significant health risks, both in the short run and in years to come. I am quite concerned about both the competitive aspect and the implications of steroid use for the health and welfare of players and their families.

The use of anabolic steroids and related substances constitutes, in my judgment, conduct detrimental to the National Football League. It is clearly detrimental to the integrity of professional football and to public confidence in it.

All NFL players will be tested for anabolic steroids and related substances, and for "masking agents" used to try to suppress their detection, in 1989 pre-season training camps. Lists of banned substances are enclosed for your information. If you are or have been taking any of the masking agents, you must, at the time of your pre-season training camp test, declare that fact and supply an appropriate written explanation from your physician; if you do not do so, a positive result for any masking agent will be treated as positive for a banned steroid and carry the same consequences.

The combination of health and safety risks and competitive advantage on the playing field distinguishes steroid use from the use of so-called street drugs and from alcohol abuse. Accordingly, a positive pre-season test this year will result in your being removed from your club's training facility, placed on Reserve/Non-Football Illness, and prohibited from any further participation with the club for a minimum of 30 days from the time you are advised of the test result, or until your system is shown to be clear of steroids and/or masking agents, whichever is later.

A positive test will also mean that you will be subject to frequent reasonable-cause testing in the future, as players who have previously tested positive already are. If you again test positive this year for steroids or related drugs, or for a masking agent, you will be suspended for the rest of the season (including any post-season play).

Please be guided by this information and avoid the adverse risks and consequences, to yourself and others, that steroid use entails.

Sincerely,

PETE ROZELLE
Commissioner

The CHAIRMAN. Thank you, Mr. Davis.
Miss Baker?

STATEMENT OF DOROTHY R. BAKER

Ms. BAKER. Thank you, Senator Biden, for giving me the opportunity to appear before this committee, and congratulations on the passage of your amendment to the drug bill.

I would like to state at the onset that my concerns on anabolic steroids go far beyond athletics. I am concerned for the future of our youth including my children and three grandchildren and their development as whole persons.

My involvement with the U.S. Olympic committee goes back to 1975 when I was appointed Delaware State chairman. I am a volunteer. Delaware has had an active committee of 50 members including past and present Olympians. But three quadrennials we raised more money per capita than any other State and in the 4 years ending in 1988, exceeded 200 percent of our goal. I was elected to the executive board of the USOC in 1985 and reelected last month in Portland, OR, at the House of Delegates meeting. The USOC is an organization of organizations, and I am the only representative of the State Olympic Organization.

Delaware has enacted two pieces of legislation on the Olympics. One is a broken time payment of up to 90 working days to state employees who participate in the games. The other is the State Olympic tax check-off. My dedication and commitment to the Olympic movement and its ideals are strong.

I think I would like to say at this point that they are even stronger for people like Diane Williams.

In January, at my own expense, I flew to Colorado Springs for the 1992 USOC budget review meeting, which was preceded by a drug control meeting led by our executive director, Baaron Pittenger. We the USOC, are involved against drugs on many fronts, but we can not do it alone. The bottom line is money. To demonstrate the growth of the USOC's activities: in 1976 our national total 4-year budget was $13 million. For the 1992 quadrennial, the Sports Medicine and Science committee alone is budgeted more than that amount, $6 million of which is drug testing and drug education, including $1 million earmarked for support of the U.S.-U.S.S.R. drug testing agreement. Our overall budget for the 1992 quadrennial is $249 million, which is $100 million more than 1988. That amounts to $170,000 a day for the USOC to accomplish our mission.

We have a cash flow problem. The TV money which amounts to 27 percent of our total budget is not available until 1992. Further, the majority of the American public gets excited, and makes donations, mainly during Olympic year. Our athletes need help today for adequate preparation. And it takes a tremendous amount of money. One significant step that could be taken would be a Federal tax check-off opportunity for the Olympics. As a volunteer fundraiser, I urge the Congress to give this serious consideration. If the American public is demanding more medals at Olympic competition, then it behooves all of us to take an active part in seeing that

our athletes are properly trained and make sports fair play, which is without anabolic steroids.

I applaud the athletes for addressing this issue. Our athletes are role models. Their coaches and trainers are role models. They must face up to this problem now. We need cooperation from every segment of America. No one organization or group can tackle this alone. It has to be a team effort and it can be done through education, strict law enforcement and cooperation of all sports-governing bodies, both here and abroad.

Following approval of our June Executive Board meeting, a drug exchange program between the U.S. and the U.S.S.R. will go into effect. There is a USOC Sports Medicine and Science Division Newsletter published called Sportmediscope. A pull-out insert is Drug Education News. The USOC has a Drug Education 800 Hotline number which averages ten to twenty phone calls a day. Our new Substance Abuse committee is chaired by Edwin Moses.

A letter to the editor in the December 5 Sports Illustrated magazine in response to the Tommy Chaikin article prompted me to write to Governor Castle to start the ball rolling on legislation in Delaware to make it a felony in the State of Delaware for physicians to prescribe anabolic steroids for the purpose of athletic enhancement. With more study of the problem, I now think the proposal should be broadened. Nationwide, there are presently 49 anabolic steroid bills that have been introduced in 26 States.

Winning is the name of the game with a lot of people in this country. Let us win this drug problem. Let us get the proper legislation passed within our States and let us use one of the greatest assets we have, our volunteers. There is a USOC chairperson and committee in each State. Use us. We have a commitment to our youth and athletics, and the future of this country.

Thank you.

Mr. QUICK. I guess my purpose is very similar to that of Evelyn Ashford's. I am a Philadelphia athlete who has achieved "superstar" status without the use of an anabolic steroid and I can stand here and just attest to that. My main concern, probably, would be for the youth in a drug-infested society as we are in already to have something like an anabolic steroid be a question in a youth's mind whether or not they are going to do it or not do it in trying to be a superstar. That is my concern. That is the reason why I am here, just to be able to give you the side or point of view of an athlete who has no contact or knows nothing about the anabolic steroid.

The CHAIRMAN. I appreciate your being here, Mr. Quick. You have the job I dreamed of—I did not want to be president—I wanted your job. I think you are one of the great ones and I am glad you are in Philadelphia because, as you know, we Delawareans assume it is really the Delaware Eagles, not the Philadelphia Eagles.

But all kidding aside, it is an honor to have you here. And, my God, if I could do my job like you do your job, the country would be better off.

But let me thank you all for coming and say two things before I begin the questioning. One, I am not looking for people to name names. I am not looking for anybody to come forward here and sug-

gest they know Charlie or Harry or Bill or Mary uses anabolic steroids.

And second, to say to Miss Baker that if the law had passed last year and it could be proven in a court of law that the assertions Miss Williams made about her coach were true, he would be in jail for 3 years under the new law. Because if, in fact, a coach or anyone sold steroids, and it was proven in a court of law, he would be in jail. We also passed another law in 1984 that I sponsored with one of my colleagues, Senator Thurmond, called Flat Time Sentencing. When we say 3 years in jail in the Federal system, it means 3 years in jail in the Federal system. Judges are not allowed to give you probation in the Federal system.

But at any rate, let me move to some questions and start with you, Mr. Davis. The new testing policy of the NFL is obviously considerably stronger than it was last year and the penalties are stronger for steroids or masking substances—meaning those things you take to try to hide the fact you were taking steroids. What do you think prompted this?

Mr. DAVIS. I think there are several things that prompted it. Going back into the use in the college ranks is one thing. And the seriousness of the general problem, not only in the National Football League, but the general public itself. You got to think about a player, not only his livelihood and his meaningfulness to you as player, you are dealing with a human being and a person. You got to look at what is going to happen to this player 5 years down the road before or even after he has completed his career in the NFL. And these things are a great concern to all of us.

Each year for the last several years the NFL brought in 300 plus top college athletes into one site for physical examinations, medical, orthopedic and drug screening prior tc the NFL draft. And in 1987 we started testing for anabolic steroid use. There were 329 athletes tested at that site and 21 tested positive for steroids. In 1988 there were 361 athletes tested with 10 showing a positive. And this year, in 1989, we tested 340 athletes and eight had a positive steroid use. So there has been a decrease in the use of steroids in college athletes that we are testing. And hopefully the educational message that is being presented, not only by the NFL, but by the colleges and the U.S. Department of Public Health, et cetera, is reaching some of these people.

The CHAIRMAN. Let me be cynical for a moment. I do not doubt what you are saying, but let me play the role of a devil's advocate for a moment.

These college athletes know they are going to be tested at a certain time and place; correct?

Mr. DAVIS. That is correct.

The CHAIRMAN. According to the medical literature on the subject, there is the ability to discontinue the use of the steroid a certain period out from the test and not be able to be detected. Is that not true?

Mr. DAVIS. That is correct.

The CHAIRMAN. So that if a football player were to have completed his season, even if it was a postbowl game postseason game, he would be finished by January 1, 2, 3, 4. If they were to discontinue the use of steroids from that period to the period of testing, would

they be able to go undetected, assuming they had been using it up to that point?

Mr. DAVIS. Most likely they would be able to go undetected if it were oral. There is greater chance of detection if it is injection with an oil base. So, yes, there is that possibility. However, they will be tested again if they are drafted or if they are chosen by any team in the league, they will be retested.

The CHAIRMAN. When does the first test take place? What month?

Mr. DAVIS. The first test of this select group is in February.

The CHAIRMAN. And then they will be tested again upon being drafted or pre-season?

Mr. DAVIS. Pre-season.

The CHAIRMAN. Which starts——

Mr. DAVIS. Which would be in, approximately, the 1st of August.

The CHAIRMAN. There is, at least in other areas, the ability to discontinue the use of drugs prior to a known testing period. So a college athlete could stop even if he had a postseason game and not use it during this select test of the 350 or so athletes. Then he could start again, continue his workout regime, and stop in July for his test in the beginning of August; correct?

Mr. DAVIS. That is correct.

The CHAIRMAN. Again, I am not passing judgment, but it seems somewhat strange that the percentage testing positive would be dropping at the same time the percentage using steroids nationwide is increasing. I am not talking about the NFL, in particular.

And a third question about testing, if I may. If you never had a positive test during the season, are you, as an athlete, subjected to random testing? Can you just walk in a locker room one day before a game and say, okay, Smith or Wilson, we are testing you today.

Mr. DAVIS. No, not unless there is probable cause. The reason for that, it all pertains to the collective bargaining, the Management Council and the Players Association.

The CHAIRMAN. There is a collective bargaining question of concern, is there not?

Mr. DAVIS. That is correct.

The CHAIRMAN. About the willingness to allow testing for steroids.

Mr. DAVIS. Yes.

The CHAIRMAN. Now, one last question, and I realize you are a trainer and some of these questions may be beyond your expertise. And if they are, please indicate so.

Is there any distinction made in the collective bargaining discussions between substances that are totally illegal under the law and those that are legal? If anyone were using cocaine, for example, they get convicted of a crime. Right now, however, if you are using a steroid, it is not a crime unless you can prove you wrote a phony prescription, or unless you are also selling while you are using.

Is there any distinction made between the random testing for drugs that are illegal, and random testing for drugs that are legal when consumed, in this case, steroids?

Mr. DAVIS. At the present time there is no collective bargaining agreement.

The CHAIRMAN. I mean in terms of the argument.

Mr. DAVIS. In terms of the argument, Mike, do you want to answer that one?

Mr. QUICK. No.

The CHAIRMAN. Well, it is a more appropriate question to be asked of the player rep and it the council. You are not lawyers and you are not here representing the league in that sense, so I will follow-up with other witnesses on that. But I just wondered if you had a knowledge of it.

Mr. DAVIS. I personally feel that it should be the same; that a penalty should be strong enough to include this and be imposed upon it.

Mr. QUICK. There is no criminal action. The only real penalty is that you are going to be stricken from the league. You are going to be banned from the league for the first time, I think it is 30 days, an the next time they suspend you for the season. And then the third time you are expelled from the league infinite. I think that is——

The CHAIRMAN. That is pretty serious punitive action.

Mr. Quick—it is hard to call you Mr. Quick. I do not know you well enough to call you Mike, but it is hard to call you Mr. Quick. Like all famous people, everybody knows you by your first name as if we are buddies or something.

But Mr. Quick, you do not, as you have indicated, use steroids. And I would not like you to tell me about anybody else who uses them, but try to tell me whether or not you can tell when someone cross the line from you or one of your opponents is using steroids. Is it a conscious thing? Do you look at the guy across the line and because he is acting beyond his usual competitive self, or because he is particularly formed you think he is taking steroids? Is it something you consciously think about?

Mr. QUICK. You never consciously think about it and I do not think you can just look across the line and see an opponent and say, I think this guy is pumped up on steroids.

The CHAIRMAN. Yes.

Mr. QUICK. There is some instances where the guy on your team that you can see—and this is even on other teams, you can see a change in the guy's physical appearance in 1 year, from 1 year to the next. And you can assume or you can think—you know that it is not all natural and something had to occur in that year that caused him to look like he looks now. But there is no way that you—the nature of the game, we are sometimes crazy people, anyway. So you can not just look at a guy across the line because you see fire coming from out of his head or something and you just assume that he is a steroid user. That is the nature of the game is such that you see guys pumped up just because of the——

The CHAIRMAN. Adrenaline.

Mr. QUICK [continuing]. The adrenaline flowing and everything that is happening around them. And that is a lot of times, the reason why guys are all pumped up. But you can not just look at a guy and just say this guy is on steroids. There is no way that you can tell like that. You can see, like I said, physical changes from year to year. Or in just a few months time and you can assume and sometimes you are right in a lot of cases. But there is no real way of telling.

The CHAIRMAN. I realize things have changed a lot since I graduated from here in 1965, but I used to be a Baltimore Colts fan. I apologize to you as an Eagle for that—in Delaware you are allowed to look to the south once in a while. And there was a guy who played pro ball then. His name was Big Daddy Lipscomb, and he was one of very few pro ball players that topped out around 300 pounds. And there may have been others, but I do not think there were many.

I was watching one of the playoff games this year, and I was very impressed when they put the average weight of the offensive line of both the teams playing in this particular college ball game on the television screen. The average weight of the one team offensive line was 294. The average weight of the other offensive line was 283 or 285. And I thought to myself, my goodness, how nutrition has moved along. Back in the early 1960s there was not a whole lot of weight training. And diet may have changed, but usually those kind of changes take place over centuries, not over decades.

And so that is why I asked the question because after reading the literature about increased weight—one of the giveaways in male athletes—does not always mean that the person is on steroids. If Smith shows up at camp in 1987 pressing only 290 pounds, weighing 205 and running the 40 in great time, and the next year he shows up and he is benching 350, weighing 250 pounds, and he has increased his speed by 100th of a second you kind of look and wonder; right?

Mr. QUICK. It is not natural.

The CHAIRMAN. It does not seem natural to me.

Without speaking about the Eagles, or without you speaking of the Eagles, are our coaches and trainers told to look for that? I mean, don't you, as a trainer, wonder about that when it happens?

Mr. DAVIS. Yes. Very much so.

The CHAIRMAN. Do you all question the person about that?

Mr. DAVIS. We will talk to the individual, emphatically talk to them. And their first defense is always denial or I am not on it now. I was on it 4 years ago. There is always an answer. But it is a great concern of Buddy Ryan's. Buddy and I speak, probably, at least once a week on this subject about present players and players that are under consideration for the future. And I think it was 3 years ago Buddy Ryan was burned by a draft pick. And the old saying of you betray me once, shame on you; and you betray me or wrong me twice, shame on me. And Buddy is not going to be caught again. I can truthfully say that knowingly Buddy Ryan will not draft a player or sign a player that has any drug problem in the future.

The CHAIRMAN. It would seem to me there is a great incentive for owners and anyone associated with a team to not go out of their way to change that. If I am a coach, I am going to be as happy as a devil if this guy comes back 50 pounds heavier and a lot stronger. That is what every coach sends you home in the off-season to do.

Pat, that is what you train people to do; right?

Mr. CROCE. That is correct.

The CHAIRMAN. So if they come back stronger and heavier, whether it is through natural means, as you teach them, or un-

natural means, you as a coach must say, "my Lord, I thought I was going to cut him this year, but look at him. He hit that sled so hard he is popping the rivets." Is a coach or an owner's first instinct to say, we have to figure out how to get rid of this guy? Maybe he is using steroids?

Mr. DAVIS. Senator, I think part of this goes back to the high school player. This youngster is 16, has not reached puberty, but he wants to get bigger. He will experiment. Does reach puberty. Continues to experiment. Tries to get larger. Does not take into consideration the harmful effects it is going to cause for him and he is looking for the possibility of the college scholarship, knowing the value of a scholarship in dollars and cents.

He goes on to college and now he is hearing the same thing a lot of times from his coach you got to get bigger. You got to get bigger. And in the back of his mind he knows he must get larger to play that position. And he continues to get larger, synthetically.

And then he is one of the few or the very minute percentages that goes on in the professional ranks. Many times you will see a player at the professional level. Again, he is not large enough to be there. But he is risking his health against dollars and cents to maintain a position on that ball club. He thinks, hey, the side effects, this is not going to happen to me. I am not going to have a liver problem. I am not going to be overaggressive. These things that we all so well know that are going to happen to him, he says, no, it is not going to be me. But, invariably, it will be him. It will catch up with him.

The CHAIRMAN. What responsibility do you think Mr. Davis, that coaches and trainers have to inform their athletes of the negative affects, as best they know them, of steroid use?

Mr. DAVIS. They have a 100 percent obligation to that player to make him aware of every ill effect that they possibly can, whether it is steroids or an other illegal substance or health care maintenance program in any way. And in our particular program we have handouts for our players. We have video cassettes. They come in the training room at the end of the day for treatment, and we periodically put a cassette on and that is the only thing they ever watch. So the TV today you are going to watch a cassette. We have a psychological counselor, drug counselor, he counsels on many problems. But once every 2 or 3 weeks it is mandatory that all players go to this meeting after practice and hear this individual speak. Many times it is on——

The CHAIRMAN. So you do have—so they do actually get——.

Mr. DAVIS. We definitely have an in-house program.

The CHAIRMAN. Mr. Croce, you have an ability to take already-great athletes and keep them in condition and help them increase their performance, particularly after injuries. Do you have any sense of whether or not what Mr. Davis suggested is correct regarding the early pressure of high school students who want to go on to make it in college on a scholarship being seduced by the use of steroids, or college players who want to enhance their ability and capability to go on and play in the pros? Or do you not have an opportunity to deal with that?

Mr. CROCE. Senator Biden, I totally concur with both those sentiments. And I do believe it starts in high school because that is

when they are at a moldable age. And whether it be peer pressure, parental pressure, competitive pressure—and I think we should not forget that young Joey goes to the gym and he comes home and he is looking pretty good and dad pats him on the back, yes, Joe, you are getting bigger and looking better. And young Joe does not tell him he is been popping an injectable in his butt. So Joey now feels parental pressure. And he can not stop, then he starts shrinking back to normal size.

We, as trainers, physical therapist, conditioning coach, we can put muscle mass on an athlete, but at the most per year, at the most per year lean muscle mass, 12, 15 pounds. You can not compete with 40 pounds in 6 months, which a steroid can do. We can not compete with that. So what we have to do is try to educate. And the parental pressure, the peer pressure and high school, as it translates into high school and the scholarships and the moneys come, they are addicted and things now, not addicted per se, like cocaine, but maybe so. That is what hopefully will come out of these hearings that there is a psychological addiction. But they now are addicted, maybe, to money, to fame, to the security that comes with being bigger, quicker, faster. But concern now is, it is just not athletes.

The CHAIRMAN. Can you tell if someone who is working under one of your programs or in your gym over a period of time is using steroids?

Mr. CROCE. Senator Biden, our facility for sports medicine primarily with rehabilitation, but we do a small percentage of conditioning. And I would say yes, you could tell. Not only physically by the look, as Mike Quick had stated, that it is not natural when you see someone coming back a year later. But also psychologically, the adverse affect that it has on the mind, the behavior patterns that Dr. Katz will probably talk about later. That is what you can tell more than anything. They are not nice people anymore. You can tell they have changed. You can not be on a steroid and be aggressive in the gym and attack those weights and get bigger and badder and then leave the gym and say, oh, I am nice and easy. It does not work that way. It plays with those neurons in the mind and you can not turn them off.

The CHAIRMAN. Would you repeat your statement about how much lean muscle mass—I think that was your phrase—can be added with significant hard work and conditioning over a period of a year?

Mr. CROCE. Ten to 15—15 pounds at the most. Fifteen pounds and this is researched. And that is through hard work, as Evelyn Ashford said, through hard training, through a lot of motivation and self-discipline and through proper nutrition. And that is what we do have to educate these young athletes, and even individuals that there is an alternative, a safe alternative.

The CHAIRMAN. But there is no way to add 40 pounds of muscle mass.

Mr. CROCE. No. It is—I should say, in my experience, it is impossible.

The CHAIRMAN. Mike, how do you feel about competing against athletes who you think are using steroids?

Mr. QUICK. I do not think it is going to hinder me from doing anything that I do. I do not like the fact that there could be guys out there who, like Pat was saying, mind may be altered because of these drugs that they are taking and they are so psyched out that they go around breaking people's legs and arms. I worry about things like that. But as far as competing against, you know, that does not concern me at all.

The CHAIRMAN. You are okay, pal. Here we are talking about guys adding 40 pounds of muscle mass and you are sitting there, saying it does not bother you. I think that is why you are such a great champion—that is what I call confidence.

Mr. QUICK. When Otho was talking earlier, he was talking about how much the organizations are trying to do to educate the athletes and let us know about the affects of these drugs, they do a good job with that. But still, it boils down to the athlete. It is up to the individual person really not whether he wants to subject himself to that or not. And I think the main emphasis and the target should be young people. Because if you educate the young people and let them know what is going to happen to their bodies later on in life, I think they will make a wiser decision and there will be less people that you have to be concerned about growing up and abusing themselves like this.

The CHAIRMAN. Do any of you agree with Miss Baker's statement that doctors who prescribe steroids for athletic enhancement should face criminal penalties?

Mr. CROCE. Yes. I totally agree with Dorothy. I think anyone who uses them should face criminal penalties. I would like to see the negative connotation of cocaine on anabolic steroids. It has taken Len Bias to put cocaine on the map. Hopefully it is going to take people like Mike Quick and Evelyn Ashford to put anabolic steroids off the map and show that you can do it without it. But anyone who prescribes them for physique-enhancement or performance-enhancement drugs, I think you should just up the—up it from 3 years and put a zero behind there.

The CHAIRMAN. How about coaches, Mr. Davis? If the medical evidence indicates that an athlete cannot add 20, 30, or 40 pounds of muscle mass over a year, and that occurs or there are other objective standards that should make the coach question the use of steroids, should a coach be responsible?

Mr. DAVIS. By all means. Certainly should. And there should be criminal—if it is a criminal act, justice should be served.

The CHAIRMAN. Back to you, Mr. Croce.

Mr. CROCE. You can call me Pat.

The CHAIRMAN. Well, because you are a two-time world champ in karate, I am going to call you Mister.

How do you make the case to somebody who is using steroids that it is wrong to take them? If you condition for hours a day in a gymnasium you can tell that individual "If it all works well, I can put on 10, 11, 12 pounds of muscle mass" and he replies. "But I can add 20 to 25 or 30 doing the same workouts if I use that injection." What do you tell him?

Mr. CROCE. I tell them to drop their pants and show me how manly they really are. They want to get bigger and manly, but then their testes shrink. And as Diana has told us with regard to

the clitoris of the female, it enlarges. You have to scare them. You have to scare them. That is the only way you can do it because we are competing with something we know not of. There is the injection and there is us. We can tell you safely that we can put on 10 pounds in a year, but we can say that it is safe; that you will not have effects with your liver enzymes, your hair will not fall out, acne. But players, what they do not see, they do not believe. Our biggest motivation for athletes to get bigger and look better is the mirror. It is not always the dollar. It is the mirror. And everyone has a mirror and they are looking in it more frequently now because fitness has turned into a trend. It is not a fad anymore. Body beautiful is in.

So we have to try to educate them on the negative side effects of anabolic steroids. But first we should tell them that they do work so that we do not look like liars and fools. Yes, they will make you bigger, but we are talking about a short-term result over the long run. As Pat Connolly stated, do you want to have children? What will be the changes of your liver and your kidneys? We do not know.

The CHAIRMAN. Miss Baker, many athletes and coaches, including some of our witnesses, believe that there is an inherent conflict in relying on the U.S. Olympic committee or any other governing body to conduct fair and impartial drug tests when that same organization is also charged with pushing for gold medals and promoting the sport. Do you think there is any inherent conflict?

Ms. BAKER. I do not really know. This whole drug situation is rather new to me in the detail that we have gone into it today. With the Olympic Committee's organization being the organization of organizations, I found so many people that are sitting on that committee, on the Executive Board, are out for themselves. They are interested in their own sport. They really do not care about the other sports. We see the summer people versus the winter people and things like that. So I really do not know how to answer your question.

The CHAIRMAN. Commissioner Rozelle's testing policy, is the NFL's new steroid policy. Will these tests be conducted by outside, independent organizations?

Mr. DAVIS. That is correct.

The CHAIRMAN. And the results will then be forwarded——

Mr. DAVIS. That is correct

The CHAIRMAN [continuing]. To the NFL.

What about that kind of policy for the Olympic committee where they do not conduct it, but some——

Ms. BAKER. I think that is the only way it is going to be, especially with TAC. I think they should go to an outside agency.

The CHAIRMAN. Well, there are many, many more questions I would like to ask all of you, but I will not.

But let me conclude with this panel by asking you all the following question: If you had my job, what would you be doing with regard to the steroid problem? Or what would you like to see me be doing, or the Senate, the Congress, or the Government doing?

Dorothy?

Ms. BAKER. I was just going to say, I think education is probably one are the largest areas in which we can help cope. And unfortu-

nately, as I said in my opening statement, everything costs money and this is tough. It is tough for the USOC. But we have a hotline. We would like to open that up nationally, but we do not have money to fund that nationally. All the NGBs know about it and they are getting calls from these youngsters that are coming in that are 14 years old. They are taken to a hospital in the emergency room and they call the hotline at 11 at night to try and find out if they can take a certain drug.

So education is the main thing and the USOC is addressing that. And I am sure within all the sports-governing bodies they probably are, too. But we need more visibility on this, very definitely.

I am appalled at the counterfeiting that is going on in this. I think I read $100 million a year forgeries going on to some of these kids. They are going into gyms. Even in our own State, I understand. And this is tough. I mean, it is time to get tough.

The CHAIRMAN. Explain what you mean by that, "counterfeiting."

Ms. BAKER. Well, I guess they go in and try to sell. They are not giving them the steroids. They are giving them something else. I guess the doctors could address to this more than I could.

The CHAIRMAN. Mr. Davis?

Mr. DAVIS. I agree on the education programs, but there is already quite a few education programs out there and I do not know if they are reaching the problem or getting the answers out. I think it really comes down to another point that Dorothy just mentioned, and that concerns money. As long as there is the almighty dollar to be made, there is somebody out there, legally or illegally, they are going to grab it. That is part of the problem right now. I think that there should be stronger penalties, better laws on the book and more harsh laws. Then if it gets right down to an individual involved in a sport, they should be blackballed, banned for life and be done with it.

Mr. QUICK. I agree. I think the penalty should be much more severe. Like I said earlier, I think we should target the youth. I think that is where we start. There are guys in professional sports now are already experienced, who are already experimenting with anabolic steroid and all other sorts of drugs, and that is going to be there. I think the situation now, there is no way to just clean it up in professional sports in a year, in 5, in 10 years. I think if we start early with the young people so that they do not have that big temptation in trying to do that. There is always going to be the temptation. But if we educate them enough, then they will be able to make a much better decision, maybe to make an educated decision and they will not have to go that route.

The CHAIRMAN. Pat?

Did you want to add something?

Mr. DAVIS. Yes. Going back to this education one more time. Mike is 100 percent correct in educating the youth. But so many times we educate the youth and we forget about it. They move. You know, they are in the sixth grade and they are on up the ladder. We forget to go back to that group the next year. But we got to keep going back and going back and redoing it. And we get tired of hearing ourselves, but that is the only way you are going to do it. It is repetition.

The CHAIRMAN. Do you get criticized by your colleagues for being so outspoken on this?

Mr. DAVIS. Yes. Sometimes. No, not really. No, not by my peers in the profession, no.

Mr. QUICK. I might.

The CHAIRMAN. I kind of thought you might, Mike. But, then again, anybody that is not afraid of that 40 extra pounds of mass across the line can handle it.

But all kidding aside, I would think there would be some real pressure. Even the guys who do not use steroids may be thinking you sound like you are holier than thou, and the guys who do use them, would not like it, either. But I think you are going to see, over the next several years some real backlash from the public about sports in America, from Olympians straight through to college sports, to pro sports. There is a feeling of resentment that is growing, and I do not know how it will manifest itself.

Mr. QUICK. Right now we have started a professional athlete organization called Advanced Athlete and we are putting a lot of emphasis into the clean athlete doing it the right way. You learn the fundamentals, you work hard, and you learn that those who sweat more in peace, bleed less in war. And it is true. You work on developing those skills and you become a better athlete that way, not through any shortcuts. Not in the fast-food methods. You just work and you be the best that you can be.

The CHAIRMAN. Pat, we are then with you.

Mr. CROCE. Two-fold. Education, first of all. Not only in scaring them with the side effects, negative and medical side effects, but also using role models, such as Evelyn and Mike and Julius Irving, to show that you can be that superstar without the use of any ergogenic aids, with hard work, proper nutrition, a positive mental attitude.

And also to educate the parents via the Senate coming down that way. We may be able to hit the schools, but we can not get to the parents. You can get to the parents and I commend you for that.

And the other half is for those who already use it, education is not going to work. You have to penalize. And you see a superstar, you see this great athlete endorsing all these products, I rather see that great athlete behind bars telling how good his cot is. That might scare someone.

The CHAIRMAN. That is an incredibly difficult problem and we in the government are just beginning to look at it. And I think many other areas are beginning to look at it. I appreciate your being willing to take the time—yes, Mr. Davis.

Mr. DAVIS. I would like to, in closing, for the group that is here right now, thank you for spearheading this great problem. But I wanted to take my hat off to the three ladies that were here before this particular panel for sitting here and opening their guts up to the world about their own problems. And I thank you. [Applause.]

The CHAIRMAN. I tell you what, Mike, it would not be bad to have their speed, would it?

Mr. QUICK. No doubt about that.

The CHAIRMAN. Well, at any rate, I appreciate all the witnesses. I know it is a significant inconvenience. But I think this may be the beginning of something we can do because there is something

wrong in the system—it is not just the existence of the steroid. You can say to a lot of guys, "You can be like Evelyn and you can be like Mike and Julius," but they look like me, and their response is, "Not unless I am reborn again can I ever be like them. You can get me in the gym as long as you want. I am going to be good, but not as good as them." But—there has to be room for all levels of athletes, assuming that they can play and be good and do not have to be born with the talent.

But at any rate, I thank you all very much. And I may very well, over time, come back for more advice, not necessarily in a hearing, but I would like to be able to call on you occasionally as we begin to develop this because I truly have an open mind about where to go from here. I am not certain, but I know something has to be done.

Thank you all very much. I appreciate it.

Our last, but far from least important panel of witnesses is made up of three distinguished individuals.

Dr. Yesalis, professor of human development at Penn State University and is one of the leading experts on the extent of abuse and health effects of steroids. He is a coauthor of a 1968 steroid study which estimated that up to 500,000 male high school students used steroids. And in a follow-up study he found that 40 percent of these kids can be considered heavy users. Most of them have started before the age of 15. He supports the concepts of making steroids a controlled substance and he will tell us more about views on issues as we go along.

And Dr. David Katz is a faculty member of the Harvard Medical School and Duke University School of Medicine.

And Dr. Edward L. Langston from Indianapolis, who is a family practitioner representing the American Medical Association, the AMA.

Welcome, gentlemen. And if you have testimony, I would like to hear from you in the order that you were called.

Drs. Yesalis, Katz and Langston.

STATEMENT OF DR. CHARLES YESALIS, PROFESSOR, PENNSYLVANIA STATE UNIVERSITY; DR. DAVID KATZ, FACULTY MEMBER, HARVARD MEDICAL SCHOOL, DUKE UNIVERSITY SCHOOL OF MEDICINE; DR. EDWARD L. LANGSTON, REPRESENTATIVE, AMERICAN MEDICAL ASSOCIATION

Dr. YESALIS. Thank you, Senator. What I would like to do is enter my prepared statement and I would like to make some comments.

The CHAIRMAN. Without objection, your entire statement will be entered into the record as if read.

Dr. YESALIS. First of all, I would like to reinforce that what was already mentioned; that anabolic steroids are not euphoric drugs. They don't give you pleasure. The appetite for these drugs has been created by our society based on our interest in appearance and win at all cost. When you were talking about the USOC, I don,t know if you had a chance to see George Steinbrenner's editorial in the New York Times two Sundays ago where he said winning is everything. When against, he really slighted people who said we want to com-

pete for competition's sake. And I think it is this attitude that really perpetuates the use or the incentives to use these drugs.

Another comment that I would like to make is I think it is true in track and some endurance events that you can still win while clean. But what I think is a real travesty in the major strength sports is, to me, it is almost incomprehensible to think that you could even compete at the high level without these drugs. They work so well in the strength sports.

The CHAIRMAN. Give me an example of the strength sports so that we have it on the record.

Dr. YESALIS. Field events, weight lifting, power lifting, linemen in football, collegiate, NFL.

Another comment I would like to make in regard to how coaches are involved in this, I think track is an exception. Coaches do not need to be involved in the distribution of these drugs because they are so readily available, as you already know, on the black market or several studies have shown 20 to 30 percent of users obtain their drug by prescription from a physician.

It was very interesting. A friend of mine interviewed practically every NFL team physician and the team physicians all told her, yes, there is a problem in the NFL, but not with our team. They were all pointing their finger at some other team. In our study we did at Penn State about adolescents using these drugs, we only found 15 percent of our schools in our sample reported no steroid use. And yet Dr. Swenson, when he was at Michigan State interviewing 490 some coaches, only 12 percent of high school coaches acknowledged that there was any steroid use on their team prior to 1988.

The CHAIRMAN. To put it the other way around, 85 percent of the schools in America said there was not steroid use at their school?

Dr. YESALIS. In our sample.

The CHAIRMAN. In your sample.

Dr. YESALIS. That they had at least one steroid user.

The CHAIRMAN. OK. Yet only——

Dr. YESALIS. Twelve percent coaches.

The CHAIRMAN. Of the same sample?

Dr. YESALIS. No. Different sample. In 497 high schools at Michigan, only 12 percent of coaches acknowledged that they had a problem. And travelling around the United States talking with people, this seems to be a strategy that I have viewed a lot, what you term plausible deniability, just putting their head in the sand, whatever you want to call it.

The other comment I would like to make is announced testing just does not work. The IOC, obviously, agrees with that. That is why we have negotiated with the Soviet Union and the East Germans about doing random testing. It has nothing to do with whether something is oil based or not oil based. It is whether it is fat soluble. And there are injectables, that based on recent research by a colleague of mine, shows that you could likely take some injectables the day you are tested and still get away with it.

The CHAIRMAN. Is that right?

Dr. YESALIS. In regard to testosterone testers, there is that distinct possibility, and we have not proven that beyond a doubt, but we are very suspicious that the drug tests used for testosterone

testers simply are not sensitive enough. And I think that needs to be looked into it because what that says is random, unannounced testing is not going to do it.

The CHAIRMAN. But what you are saying is for certain announced testing does not do it?

Dr. YESALIS. Announced testing for anabolic steroids works very good for drugs that you need in your system while you are performing.

The CHAIRMAN. No. I am only talking about anabolic steroids.

Dr. YESALIS. Yes. It is not worth the money. It gives a false sense of accomplishment.

The another comment that I would like to make is we do not know the long-term health affects of these drugs. They have not been established. The short term affects in adult males are transitory in nature, which take on, meaning everything goes back to normal after use is stopped. Our research, however, showing dependence, psychological dependence on these drugs, gives that an all new meaning because then you can question whether someone is really going to stop using these drugs; that they will not continue to use them on a chronic basis.

And the final comment I would like to make is that we just discussed this a couple of week ago in a technical review on the subject at the National Institute of Drug Abuse, is I really recommend against scare tactics. That has shown not to be effective with marijuana. What you need to do is communicate what you know. You need to communicate what you do not know. And we have lost a tremendous amount of credibility in this issue already, the "we" meaning the sports medicine scientific community, when between 1977 and 1984, we denied the drugs even worked.

The other potential loss of credibility is we are telling people are going to be dropping over dead and the athletes are looking at the longtime user and not seeing people dropping like flies. Now, increased death, probability of death or morbidity could be taking place, but people apparently are not dropping like flies. And I think we have to be very careful not to lose further credibility.

The CHAIRMAN. Thank you.

[The prepared statement of Dr. Yesalis follows:]

Testimony Before The

Senate Committee on the Judiciary

April 3, 1989

Charles E. Yesalis, M.P.H., Sc.D.
Professor of Health and Human Development
The Pennsylvania State University

I would like to discuss three critical issues related to the non-medical use of anabolic-androgenic steroids (AS): (1) the use of AS by adolescents, (2) the potential of AS to create psychological dependence, and (3) the health effects of AS.

Adolescents

In the past much of the public and scientific interest in AS has been focused on the use patterns exhibited by athletes, particularly elite and professional athletes. In 1989, it is evident that the use of AS has trickled down through the colleges to the high school and, probably, the junior high school level.

In the first nationwide study of AS use conducted at Penn State, we found that 6.6 percent of male high school seniors reported having used these drugs. The findings of other recent studies of adolescents conducted in Michigan, Texas, Illinois and Arkansas support these results. If the use rate from our selected sample is applied to the national population of males enrolled in secondary school, it suggests that between 250,000 and 500,000 adolescents in the country have used or are currently using these drugs.

In our research we found no major difference in the level of reported AS use between urban and rural areas or between large and small schools. Almost 40 percent of the AS users reported five or more cycles of use with a cycle being an episode of use of 6-12 weeks or more duration. In addition, of the self-reported AS users, 38 percent initiated use before age 16, 44 percent used more than one steroid at a time (i.e., stacking) and 38 percent used injectable AS. Besides football, our data implicate a range of sport activities such as wrestling, basketball and track and field. Over one third of the AS users did not intend to participate in interscholastic sports.

The largest percentages of users (47.1 percent) reported their main reason for using the drug was to "improve athletic performance." "Appearance" was selected as the main reason for use among 26.7 percent of the user group.

Only 15 percent of the public and private high schools that participated in this study had no reported AS use. However, in a recent survey of 472 head high school football coaches in Michigan, only 12 percent admitted that they had at least one player who used AS prior to 1988. In addition, recent research has established AS use among high school girls, but at a level less than that for boys (approximately 1-2 percent).

We urgently need more information regarding the profiles of adolescent users as well as better understanding of the processes involved in initiating AS use. Furthermore, the dose and frequency of use of AS and the association of use with other illicit drugs or alcohol has yet to be examined.

Psychological Dependence

Habituation, specifically psychological dependence, among AS users has been suggested by several researchers but their position appears to be based solely upon user testimonials.

Generally individuals use AS to increase strength and muscularity significantly beyond what would be expected from training alone. AS users operate on the belief that greater doses and continued use produce greater gains. When they discontinue AS use, their size and strength gains partially diminish; this outcome, as well as the purported psychological effects of use, such as increased confidence, euphoria, and enhanced libido, is thought to motivate continued cyclical use of the drugs.

The AS drug use scenario appears consistent with the World Health Organization definition of habituation as a state of psychic and/or physical

dependence on a drug, used on a periodic or continuous basis to produce pleasure or to avoid discomfort.

Our study at Penn State is the first to demonstrate that a significant proportion of adolescent AS users report behaviors, perceptions, and opinions which are consistent with psychological dependence in terms of their unwillingness to stop use, their perception of benefits from use and their rationalization of their use.

As stated previously, 40 percent of adolescent AS users in our study reported having used the drugs for five or more cycles. When compared to adolescents who had used steroids less often ($\leq$4 cycles), the "heavy user" group was significantly more likely to stack AS, use injectable AS, and demonstrate an unwillingness to stop use even if dire health consequence were unequivocally proven. Moreover, "heavy users," in relation to "light users," were significantly more likely to assess their strength as greater than average and their health as excellent. This last finding has major implications for intervention strategies in that changing a behavior that has resulted in strongly perceived benefits to the user is difficult. Not surprisingly, this "heavy user" group was comprised primarily of adolescents who initiated their use at a young age ($\leq$15).

Further research on the extent of physical and/or psychological dependence among AS users is strongly indicated. In addition, intervention strategies for dealing with dependence on AS need to be identified and evaluated.

Health Effects

The role of AS in the etiology of various disease is unclear at present. However, in both animals and humans, in therapeutic trials and in laboratory studies, AS use has been associated with numerous deleterious changes in risk

factors and in the physiology of sundry organs and body systems which suggest the potential for subsequent health problems. The best documented effects include those on the hepatic, cardiovascular and reproductive systems, although effects on the nervous system, psyche and behavior and other changes may also have a significant impact on health. Several studies suggest serious biophysical consequences for adolescents using AS, particularly in regard to premature closure of growth plates, elevated risk of injury and decreased spermatogenesis. Most, if not all, of the short term health effects in adult males are transitory in nature (i.e., a return to normalcy after cessation of AS use). However, these short term effects may have the potential to lead to harmful long term effects in the presence of habitual use, which we have now demonstrated. Less is known regarding the health effects in women although some short term effects like deepening of the voice and scalp hair loss are thought to be permanent. Overall, the long term health effects of these drugs in otherwise healthy individuals is presently unknown.

Ramifications

Since we still do not know the long term health consequences of AS, there are likely over one million AS users in the U.S. alone who lack(ed) the opportunity to make an informed judgment regarding their AS use. On the other hand, individuals who are considering using cocaine, tobacco or alcohol have much more information on health consequences available to them. Unfortunately, many current or potential AS users mistake "absence of evidence" for "evidence of absence." Even more frustrating is the fact that in two recent national studies, a majority of AS users surveyed expressed intentions of stopping use if deleterious health effects were unequivocally established. Clearly the lack of

scientific information on the long term health effects has impeded, if not precluded, the formulation of an effective health education strategy.

Some members of the sports medicine community have, with the best of intentions, adopted a conservative strategy and used strong, but often unfounded, pronouncements regarding the adverse effects of AS. Athletes, on the other hand, have simply not witnessed long time AS users "dropping like flies." This aggressive health education strategy does not seem to have had any major impact on use of AS and has very likely added to the lack of credibility created when, for a number of years (1977-1984), the sports medicine community essentially denied that AS increased strength or muscularity.

The question remains as to why no study of the long term health effects of AS has taken place. Research on AS competes with other interests in sports medicine as well as general health and disease areas (e.g., AIDS, heart disease and cancer). Epidemiologic investigation in this area, however, would be inexpensive compared to funding for any single risk factor for heart disease, for example, or for drug enforcement. A proposal to study the long term effects of AS was recently submitted to the National Institutes of Health with a funding requirement of approximately $1 million. The study was approved but not funded. Perhaps the most significant reason for absence of action on this issue has been a lack of awareness, until the past year, by most of the medical community, the government and the public regarding the current extent of use of these drugs.

There likely is a concern by some (i.e., directors of sports federations) that if, in fact, no deleterious long term effects are identified, the level of use of AS would increase further, while the moral issue of fair play would remain. Another problem has been the design, including logistics and cost, of a study with adequate statistical power to accurately and reliably identify the major health effects. In light of ethical issues as well as the concern over

false negative findings, it must also be decided whether different methodologic standards will be applied to proposed research in this area.

The potential methodologic problems that have been identified for the most part are not insurmountable. However, it is extremely unlikely for a number of reasons that a single "problem-free" study will be proposed, funded or completed any time soon. Given that currently extremely little is known about the long term health impact of AS, one would believe that there is some middle ground between the definitive study and the anecdotes, isolated case histories or ill-conceived research on which many of today's educational pronouncements are based.

The CHAIRMAN. Dr. Katz?

STATEMENT OF DR. DAVID KATZ

Dr. KATZ. Thank you. First of all, I would like to thank you, Senator Biden, and your office, and the entire Senate Judiciary Committee for calling this timely hearing; for allowing me the honor and privilege of participating.

Of the many relevant questions which remain to be answered, two are notably absent whether anabolic steroids are being used in this country and whether their use is actually endemic in certain populations, including the youth. The resounding yeses to those questions stimulated my medical interest in research, and obviously prompted this hearing.

My particular area of expertise concerning anabolic steroids is that of anabolic steroid-induced mood and behavior changes, concluding increased aggression and tendencies toward violence. We have already heard today some dramatic testimony regarding mood changes from Miss Diane Williams, who I want to commend for opening up her heart in front of all of us. Thousands more could probably tell similar, if not more saddening stories.

Let me state clearly for the record that we are all at a state of ignorance where, at best, preliminary knowledge regarding steroid affect and side effects. It is imperative that pertinent questions be carefully and scientifically researched.

For example, in the area of psychiatric affects, we need to perform a controlled study comparing 80 or so steroid-using athletes with 80 or so nonsteroid-using athletes and look at possible mood changes and behavioral changes.

I stress for requirement for great care with these future studies for two reasons. One is for the obvious need to retain useful, valid data. The second, which Charles alluded to, is equally important, but a bit more subtle. In the historical context of anabolic steroid research, physicians and other scientists have already lost their credibilities among steroid users once by publishing poorly run studies with inaccurate conclusions which steroid users, by their actual life experience, knew to be false. If we hope to educate ourselves, and then those who are or who might become involved with anabolic steroid abuse, we must do this in a responsible fashion.

Against that background, let me briefly share with you some early findings and the resultant hypothesis and concerns. By the way, much of which will go over, and more, can be found in the packet I prepared for you and other members of the committee. It contains three brief articles.

At Harvard I had the occasion about 3½ years ago to care for two gentlemen who had been hospitalized for the evaluation and treatment of severe psychosis. During the full social, medical, neuroendrocrine and psychiatric workup, the only positive finding was the history of anabolic steroid use prior to and during the onset of symptoms. One man had received steroids from his local physician for the purpose of treating impotence. The other was a bodybuilder who was using the steroids to enhance his weight lifting capacity. After noting what I felt was the possible coincidence or possible causal connection between the steroid use and the development of

psychiatric illness, I, with Dr. Pope, decided to interview as many anabolic steroid users as possible on both the East and West coasts to see what we might find.

Without describing our whole study, let me sum up the findings by reporting to you that we discovered a highly statistically significant relationship did exist between steroid use and the development of psychiatric syndromes, including psychotic episodes, depression, and mania. When I use these terms, I use them in the strict psychiatric/medical terminology, not the lay sense. In other words, there may have been many, many other people who were down in the dumps or were kind of hyper or kind of aggressive. I only use those syndromes and the titles of these syndromes in a very small, narrowly defined fashion. So this would be under-reporting.

Following publication of our study, a fascinating and very worrisome thing happened. We began to receive a large number of phone calls from attorneys who described representing clients charged with violent criminal acts, including murder, who had no prior medical records and often, quite to the contrary, were upstanding citizens who had begun using steroids for personal and/or athletic reasons. The lawyers wondered whether there might be a connection.

I have now personally spoken with clients and/or their attorneys who represented a wide spectrum of life-styles: a fully employed youth minister, a college professor, an attorney, a security guard and others, all charged with violent crimes, all taking anabolic steroids regularly, and none with prior psychiatric or prior legal histories.

The second paper in your packet, which is currently under review for publication and, thus, it is sort of considered confidential and should have be circulated, details three cases of homicide or near homicide by anabolic steroids users which have come to trial. I testified at two of those trials and was and am convinced of the causal role played by anabolic steroids in those cases.

There are many other psychiatric syndromes, as I mentioned, including psychosis without violence, including depression, which are not detailed in that particular paper, but are detailed in one of the other papers in your packet.

As a scientist, again, let me point out that these cases alone do not result in firm conclusions or findings necessarily generalizable to all users of steroids. However, these and other active cases, my preliminary and ongoing research, and the continuing barrage of calls from attorneys around the country are, to me, making a compelling argument to at least pay careful attention to this phenomenon.

Of all the reported effects suffered by anabolic steroid users, such as acne, liver changes, et cetera, psychiatric effects may well be the most prevalent, as well as the most severe, with the most serious potential consequences to the individual and to the public, at large.

Thank you.

The CHAIRMAN. Thank you very much.

[The information of Dr. Katz follows:]

KATZ + POPE ARTICLE

Report of the Ross Symposium on

MUSCLE DEVELOPMENT: NUTRITIONAL ALTERNATIVES TO ANABOLIC STEROIDS

David L. Katz, M.D.
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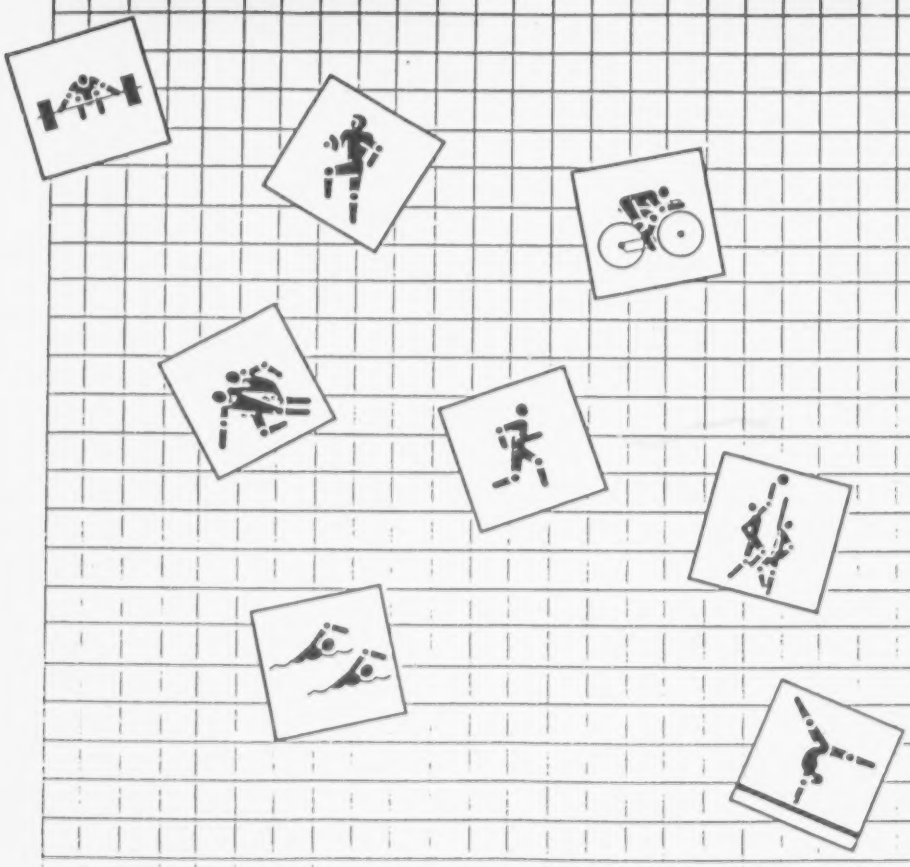

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The objectives of this Symposium were to provide a forum for researchers, physicians, coaches, trainers, and members of governing bodies in athletics to present findings from recent research in the areas of muscle development, strength gain, nutrition, and drug abuse, in particular the abuse of anabolic steroids; to share their experiences of working with athletes; to promote communication among the different disciplines; and to disseminate information and recommendations. To make the information and concepts developed during the Symposium more widely available, Ross Laboratories publishes this report.

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the attention received from increased size and strength. However, as the athletes discontinue the steroid, their body's own seriously depressed levels of testosterone cannot support the intense training sessions, and size and strength improvements quickly disappear, as do sexual drive, steroid euphoria, and peer admiration. The athletes again become obsessed with their decreasing size and appearance, and these already insecure athletes fall victim to real and serious depression. Most of the athletes cannot tolerate this withdrawal and quickly return to using steroids. Back on steroids, the athletes once again regain strength, sexual drive, and self-esteem. The thought of long-term medical consequences rarely enters their mind. They have become psychologically addicted to the steroid and its effects.

Therefore, while some significant physiologic alterations are associated with the use of anabolic steroids, these changes are mostly short-lived and can be reversed when steroids are discontinued after short-term usage. However, continuous usage of anabolic steroids for prolonged periods may predispose the athletes to more serious complications. As athletes become psychologically addicted to steroids and are unable to discontinue their use, we may see more significant adverse physiologic effects that are not reversible.

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Psychiatric Effects of Anabolic Steroids

David L. Katz, MD, and
Harrison G. Pope, Jr, MD

Venerable studies have documented the medical but not the psychiatric effects of testosterone, its derivatives, and its analogues. Toward the end of the 18th century, male characteristics were induced in the hen via testicular transplantation from the cock.[1] By the 19th century, experiments were conducted to seek an active testicular ingredient—partially in response to the belief that the physical deterioration of old age was secondary to decreased testicular function.[2] Notably, the famous French physiologist Brown-Sequard, after subcutaneous self-administration of a testicular extract prepared from guinea pigs and dogs, wrote of his increased vigor and work capacity.[3] Later work has shown that his preparation was actually devoid of active hormone.[2]

One of the first experimental uses of testosterone analogues in humans was reportedly during World War II, when Hitler's troops were allegedly given anabolic steroids to induce aggressiveness in battle.[4] By the 1950s, Soviet and East European athletes were first suspected of using anabolic steroids to enhance their performances during competition. However, despite endemic use of anabolic steroids in parts of the athletic world since the 1950s, and despite many studies of the physical and medical side effects of these drugs, the scientific community has paid little attention to their psychiatric effects. This is peculiar in view of the large amount of "common" information and lore among athletes, who consider changes of mood, temperament, and personality to be among the drugs' most characteristic effects.

Examination of studies of the medical uses of anabolic steroids reveals a few reports that describe the affective states of the patients. Davidson et al[5] treated six hypogonadal men with either 100 mg or 400 mg of testosterone

enanthate intramuscularly once every 4 weeks for a 5-month period. They reported "no consistent relationship" between mood profile and the amount of testosterone received. Luisi and Franchi[8] studied 26 hypogonadal males in a double-blind, randomized trial of testosterone undecanoate, 120 mg orally per day, compared with mesterolone, 150 mg orally per day, for 4 weeks. The subjects in the testosterone group showed significant increases on a mood questionnaire in energy, aggressiveness, freshness, and activeness. No "side effects" were noted.

Skakkebaek et al[7] studied 11 hypogonadal men in a double-blind crossover design comparing testosterone undecanoate, 160 mg orally per day, with placebo. Self-ratings of mood demonstrated significant differences during testosterone undecanoate treatment for "lower fatigue and higher vigour." Salimimies et al[9] investigated 15 hypogonadal men in a study where the subjects received an escalating dose of a mixture of testosterone propionate and testosterone enanthate intramuscularly every 2 weeks. The doses ranged from 25 mg to 250 mg per injection with a 2-week placebo injection period introduced between the periods of active treatment. Following the 5-month escalation, the patients were treated with testosterone undecanoate in doses of 80 mg to 200 mg orally per day. Mood-scale data demonstrated no significant differences between the placebo phase and any of the active treatment periods.

O'Carroll et al[9] studied eight hypogonadal men in a variable dose study. Oral androgen testosterone undecanoate was administered in daily doses ranging from 40 mg to 160 mg in increasing or decreasing amounts. Each dose was maintained for 1 month before being increased or decreased, depending on the protocol. "Relaxed," "cheerful and happy," "tense and anxious," and "irritable" were all found to have significant relationships to drug dose. In a study with 20 eugonadal men being evaluated for sexual problems (10 with low sexual interest and 10 with erectile dysfunction), O'Carroll and Bancroft[10] administered intramuscular injections every 2 weeks of either Sustanon (testosterone propionate 30 mg, testosterone phenylpropionate 60 mg, testosterone isocaproate 60 mg, testosterone decanoate 100 mg) or placebo for 6 weeks and then crossed over to the opposite treatment for an additional 6 weeks. They reported that mood-scales data showed no significant effects.

In summary, the above studies present equivocal findings, with some describing affective changes with steroids and others finding no significant psychiatric effect. However, these studies involved primarily hypogonadal males receiving replacement doses of anabolic steroids, and hence the results may not generalize to eugonadal athletes using large doses of steroids.

Haupt and Rovere,[11] in an extensive literature review, found 25 "well-documented" studies of anabolic steroid effects on athletes. Some of these studies included self-report examinations of subjective side effects. Of 155 athletes studied, 52 (34%) reported subjective side effects present only while taking anabolic steroids. Changes in libido and increased aggressiveness were the most frequently reported side effects. The average regimen of anabolic steroid followed was methandrostenolone 15 mg orally every day.

Taylor[12] reports that his anecdotal experience has led him to view psychiatric disturbance as "probably the most common" adverse side effect associated with anabolic steroid use among athletes. He writes that these disturbances "usually take the form of aggressiveness, changes in mood (elevations and depressions), and, rarely, actual psychotic illness." Although to date almost all studies of anabolic steroids in athletes have examined men exclusively, one study by Strauss et al[13] reported on 10 female athletes who used anabolic steroids as part of their weight-training routines for competitive purposes. Sixty percent reported increased libido and 80% described increased aggressiveness.

In the psychiatric and neurologic literature, a few additional reports of anabolic steroid effects may be found. Wilson et al[14] treated five men, diagnosed with primary unipolar depression, with imipramine 25 mg to 50 mg orally three times daily and methyltestosterone 15 mg orally per day. Four of the five patients developed agitation, severe anxiety, and paranoid delusions after 1 to 4 days of treatment. Upon discontinuation of methyltestosterone but continuation of imipramine, all four patients rapidly returned to their pretreatment states without paranoia.

Annitto and Layman[15] described a 17-year-old weightlifter who, on two occasions (separated by 12 months), required hospitalization and treatment with antipsychotic medication for thought disorder, paranoia, depression, and anxiety. The diagnosis of schizophrenia, paranoid type was made; the patient improved with antipsychotic medication and discontinuation of anabolic steroids. The patient reported that insomnia, cognitive dysfunction, auditory hallucinations, paranoid ideation, and ruminations had begun 6 months after he started to use anabolic steroids.

Freinhar and Alvarez[16] presented a case report of a 27-year-old male bodybuilder who had a

completely normal physical examination with normal laboratory tests before beginning a regimen of oxandrolone 6 mg by mouth twice daily. Within 2 days, the patient noted signs and symptoms of hypomania, including increased irritability, increased energy, a decreased need for sleep, continuous euphoria, and racing thoughts. He discontinued the drug and all symptoms abated after 4 days. Upon restarting a bodybuilding regimen, this time with oxymetholone, he was examined again, with a similar picture of hypomania.

Tilzey et al[17] described a 66-year-old man suffering from anemia who was treated with transfusions and oxymetholone 200 mg to 300 mg orally each day. He was admitted to the hospital at a time when his hemoglobin, platelet count, and white blood count were under good control. He had, however, developed a confused state with "ideas of imminent death and strong guilt feelings," disjointed speech, and disorientation. In addition, it was noted that he had been stopping strangers and had been making "long, incoherent, and confused complaints." Finally, the authors report continuous writhing movements of his right upper extremity and, to a milder degree, of his right lower extremity. Physical and laboratory examinations were negative; treatment with antipsychotic medication and oxymetholone withdrawal was successful.

We have treated two patients who required psychiatric hospitalization secondary to psychosis associated with anabolic steroid use.[18] Both patients had extensive medical and neuroendocrine workups, the results of which were negative. Further, neither patient had ever experienced psychiatric difficulty before using anabolic steroids. One, a 40-year-old man, had been prescribed methyltestosterone 10 mg orally twice daily for treatment of idiopathic impotence. Within 2 weeks of starting treatment, he developed signs and symptoms that met the criteria for major depression, accompanied by visual and auditory hallucinations and delusions of reference.[19] The second patient, a 22-year-old man, was a bodybuilder who took two 8-week courses of methandrostenolone 15 mg orally each day. Following the second course, he noted depressive symptoms and, later, prominent paranoid and religious delusions. Successful treatment for both patients involved brief use of antipsychotic medication and discontinuation of anabolic steroids. Two years' follow-up showed both patients to be psychiatrically well.

Intrigued by these cases, we recruited and interviewed 39 male and 2 female athletes who had used anabolic steroids.[20] Using a structured clinical interview, we found that five (12.2%) had met the criteria for a manic episode while taking steroids and that eight others (19.5%) closely approached meeting these criteria.[19] Five (12.2%) had experienced major depression while taking steroids or upon withdrawing from them. Five (12.2%) had also experienced psychotic symptoms (delusions or hallucinations) during anabolic steroid use. These symptoms included auditory hallucinations, delusions of reference, and paranoid ideation. Four additional interviewees described "subthreshold" psychosis, with symptoms that included paranoid jealousy, grandiosity, and referential thinking.

The behavioral effects resulting from the affective disturbances were often dramatic. One man, after perceiving that a driver had cut him off in traffic, pursued and cornered the offender and then smashed his window with a crowbar. Another deliberately drove an old car into a tree at 40 mph while a friend videotaped the event. A third reported twice buying expensive automobiles, beyond his means, while on steroids. Significantly, none of the subjects who experienced psychotic or manic symptoms while on anabolic steroids had ever experienced such symptoms before steroid use.

Interestingly, all of the users who reported psychotic symptoms were "stacking" two to four different steroids at the time of the symptoms' onset. In all cases, the "stack" included at least one of the orally active C-17-alkylated steroids and at least one parenteral preparation. Those who experienced mood changes frequently reported that the greatest degree of change occurred when using methandrostenolone (Dianabol) either alone or "stacked" with parenteral preparations.

The mechanism by which anabolic steroids may induce psychotic symptoms is unclear. However, it seems possible that, in high doses, anabolic steroids may have some corticosteroid-like effects. Psychotic symptoms produced by corticosteroids in some individuals are well documented.[21] Results of a study of athletes using high doses of anabolic steroids demonstrated decreased serum adrenocorticotropic hormone (ACTH) concentrations, favoring the hypothesis that high doses of anabolic steroids might mimic the effect of corticosteroids.[22] Our observations have also suggested that the dosages routinely employed by athletes (10 to 100 times greater than those used in general medical practice), together with the common practice of "stacking" two to six drugs, may increase serum levels of anabolic steroids to the point where some corticosteroid-like effects may occur.[20] This might explain why psychiatric side effects have not

commonly been noted in medical studies of patients treated with anabolic steroids—these patients were receiving much smaller doses. In any event, even allowing that high doses of anabolic steroids induce affective and psychotic symptoms because of their similarity to corticosteroids, the mechanism by which the latter drugs cause psychiatric symptoms is itself unknown.[21]

Clearly, more work is needed to further define the psychiatric side effects of anabolic steroids, the clinical situations that may predispose users to psychiatric reactions, the mechanisms behind such symptoms, and the best treatments for them.

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Effects of Human Growth Hormone on Skeletal Muscle

Tönu Saartok, MD, DSc

Human growth hormone (HGH) is a peptide that is synthesized and stored in the anterior pituitary. The production rate in adults is considered to be below 1 mg/day (approximately 2.5 iU). The hormone is metabolized rapidly and its half-life is estimated to be about 30 minutes. The biological activity of growth hormone is species specific, and only HGH and, less important, primate growth hormone (GH) act in humans.[1,2]

HGH was named for its main biological effect—to promote growth—not only in bones but also in muscle, connective tissue, and visceral organs. However, HGH also has profound metabolic action in other tissues and systems (Table 1).

HGH exerts its biologic action either directly, via specific GH-receptors, or indirectly, via the mediator substances somatomedins (insulin-like

Affective and Psychotic Symptoms Associated With Anabolic Steroid Use

Harrison G. Pope, Jr., M.D., and David L. Katz, M.D.

To assess the frequency of affective and psychotic symptoms in athletes taking anabolic steroids, the authors performed structured interviews of 41 bodybuilders and football players who had used steroids. According to DSM-III-R, nine subjects (22%) displayed a full affective syndrome, and five (12%) displayed psychotic symptoms in association with steroid use. These findings suggest that major psychiatric symptoms may be a common adverse effect of these drugs.

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Anabolic steroids are widely used by athletes seeking gains in muscle size and strength (1, 2). These drugs produce well-documented adverse medical effects, but their psychiatric effects have rarely been examined. Although some studies have noted euphoria or irritability in association with anabolic steroid use (2), only four reports, to our knowledge, have described more serious psychiatric syndromes. The first (3) described a 17-year-old male bodybuilder who developed depression, paranoid ideation, and "audible thoughts" about 6 months after starting a regimen of unknown anabolic steroids obtained illicitly. The second (4) reported a 27-year-old male bodybuilder who developed euphoria, irritability, racing thoughts, and hyperactivity within a few days of starting oral oxandrolone, 6 mg b.i.d. A third report (5) described paranoid symptoms in four of five depressed men within a few days of taking imipramine plus methyltestosterone; in all four patients, the paranoid symptoms resolved promptly when methyltestosterone was stopped.

Finally, we (6) described two patients who required hospitalization at our center for psychotic affective syndromes associated with anabolic steroid use. The first, a 40-year-old salesman, had been prescribed methyltestosterone, 10 mg b.i.d., for idiopathic impotence. Within 2 weeks he noted severe depression, sleep disorder, anorexia, psychomotor retardation, feelings of guilt, delusions of reference, and visual and auditory hallucinations. After 2 months, methyltestosterone was discontinued, and he began to take amitriptyline, 50 mg/day. Within 5 days he became sleepless, hyperactive, and grandiose and continued to have delusions and hallucinations. Physical examination and laboratory test results, including testosterone, prolactin, follicle-stimulating hormone (FSH), luteinizing hormone (LH), B_{12}, and folate levels, sleep and awake EEGs, and a CAT scan at admission were all within normal limits. Amitriptyline was stopped, and the manic and psychotic symptoms resolved within 10 days. At follow-up 32 months later, the patient reported no recurrence of any major psychiatric symptoms. His impotence persisted and remained unexplained; he had taken no further steroids.

The second patient, a 22-year-old construction worker, took two courses (totaling 15 weeks) of methandrostenolone, 5 mg t.i.d., for bodybuilding. While taking the drug, he noted increased irritability, confusion, and difficulty sleeping. After discontinuing the drug, he developed depression, trouble sleeping, nightmares, slight weight gain, prominent diurnal variation that was worse in the morning, chronic anxiety, and moderate agoraphobia. These symptoms lasted 4 months. At the end of this period, he took 20 mg of methandrostenolone and for the next 3 days noted prominent affective lability and, for the first time, delusions of reference. After a few weeks' remission, these symptoms spontaneously recurred and worsened. He believed that his mind was influencing the pictures on television, and he promised to show God to a friend. At admission, physical examination and laboratory test results, including testosterone, FSH, and LH levels, were all normal. The symptoms responded to haloperidol, which was successfully discontinued after 10 weeks. At 24-month follow-up, having used no further steroids, the patient remained asymptomatic and was working full time.

The observations described above suggest that marked affective and/or psychotic symptoms may sometimes occur in individuals who are taking anabolic steroids. To further explore this phenomenon, we recruited and interviewed 41 bodybuilders and football players who had used these drugs.

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TABLE 1. Anabolic Steroid Regimens Reported in Representative Medical Studies and by Subjects in Present Study

Study	Drug	Dose	Duration (weeks)
Representative medical studies			
O'Shea and Winkler, 1970 [10]	Oxandrolone	10 mg/day p.o.	n
Golding et al., 1974 [11]	Methandrostenolone	40 mg/day p.o.	4
Crist et al., 1983 [12]	Testosterone cypionate or nandrolone decanoate	100 mg/week i.m.	6
Present study			
Typical light use	Methandrostenolone	15 mg/day p.o.	6
Typical moderate use[a]	Methandrostenolone	20 mg/day p.o.	10
	Testosterone cypionate	200 mg/day i.m.	10
	Nandrolone decanoate	200 mg/day i.m.	10
Typical heavy use[a]	Methandrostenolone	40 mg/day p.o.	16
	Oxandrolone	40 mg/day p.o.	16
	Methenolone enanthate[b]	4 cc/week i.m.	16
	Nandrolone decanoate	600 mg/week i.m.	16
	Boldenone undecylenate[c]	4 cc/week i.m.	16

[a] All drugs taken simultaneously.
[b] Not legally available for human use in the United States; hence potency is unknown.
[c] Boldenone (Equipoise), one of several veterinary preparations used by the study subjects, is a steroid chiefly used for horses; a dose of 8 cc would represent either 200 or 400 mg of boldenone, since the drug is marketed in two strengths.

METHOD

We sent letters to 38 gymnasiums, 26 in eastern Massachusetts and 12 in Los Angeles, offering $25 for a confidential interview with any individual who had used anabolic steroids. The letter did not reveal that the interview was intended primarily to explore psychiatric symptoms. We recruited a total of 41 subjects—22 subjects in Massachusetts and 19 subjects in Los Angeles.

For each subject, we obtained a lifetime history of anabolic steroids use, the dose, and the duration of use. Steroids are typically taken in "cycles" lasting from 4 to 12 weeks, often involving several drugs simultaneously ("stacking"). Most users provided remarkably precise histories of the dates, drugs, and doses for each cycle. We then inquired about body weight and strength (i.e., the maximum weight that the individual could "bench press" or "squat") before and after each cycle, medical problems experienced while taking steroids, lifetime medical history, and current alcohol, tobacco, and other drug use.

Next we administered the axis I portion of the Structured Clinical Interview for *DSM-III-R* (SCID) [7], asking first the SCID questions about the periods of steroid exposure, i.e., when the subjects were actually taking steroids or within 3 months after stopping them (the latter to allow for withdrawal effects from stopping a cycle), and second about the periods of no steroid exposure, i.e., times other than the periods of steroid exposure. The frequency of various psychiatric syndromes during the subjects' steroid exposure periods and during the no steroid exposure periods was then compared. The significance of these comparisons was tested by Fisher's exact test (two-tailed).

Finally, we asked each subject about his or her family history of psychiatric disorder. Using methods identical to those we have used in previous epidemiologic studies [8, 9], we rated the presence of *DSM-III-R* axis I psychiatric disorders in all first-degree relatives.

All results are reported as mean±SD.

RESULTS

The subjects included 39 men and two women. They ranged in age from 17 to 51 years (26.1±7.1 years). Twelve (29.3%) had first used steroids before age 20; some had used the drugs as early as age 14 or 15. Their lifetime use of steroids ranged from 8 to 240 weeks (45.1±51.5 weeks), representing between one and 30 separate cycles per subject.

Simple observation revealed that the muscle gains achieved by these subjects were dramatic, suggesting that the medical literature may have underestimated the potential of these drugs under conditions of actual use by athletes. For example, an 18-year-old man, 72 in. tall, reported that before steroid use he weighed 135 lb. and could perform the squat (a deep knee bend with a barbell supported on the shoulders) for one or two repetitions with 135 lb. Two years later, at the time of the interview, after four cycles of steroids totaling 55 weeks, he weighed 230 lb. (with a low percent of body fat) and reported a squat of 655 lb.

Such gains may be explained by the high doses of steroids used by the subjects. Table 1 compares the steroid doses reported by subjects from our sample whose typical use was classified as light, moderate, or heavy with the doses reported in three typical medical studies of steroids in athletes [10–12]. Although dose equivalency is difficult to estimate, particularly for preparations not legally available in the United States or for veterinary preparations such as boldenone (Equipoise), it appears that many of our subjects routinely used doses 10–100 times greater than those reported in the medical studies.

None of the 41 subjects recalled an adverse medical

effect of steroids requiring medical consultation. Reported problems included acne (N=18), temporary testicular atrophy (N=5), gynecomastia (N=3), difficulty urinating (N=2), hair loss (N=3), and, in both of the women, deepening voice. Of course, in their retrospective assessments, some subjects may have minimized or forgotten particular medical complications. Most subjects were very concerned with maintaining good health: only four (9.8%) smoked cigarettes and only six (14.6%) drank more than four alcoholic drinks (1½ oz. of liquor, four oz. of wine, or 12 oz. of beer) per week.

Five subjects (12.2%) met *DSM-III-R* criteria for psychotic symptoms during periods of steroid exposure, and no subject had psychotic symptoms during periods of no steroid exposure ($p=0.055$). Among the five subjects with psychotic symptoms, one had auditory hallucinations or voices lasting 5 weeks, a second developed the paranoid delusion that friends were stealing from him, two developed delusions of reference, and the fifth developed the grandiose delusion that he could pick up a car and tip it over. Four additional subjects reported mild or equivocal psychotic symptoms (defined as "subthreshold" psychotic symptoms on the SCID) during periods of steroid exposure: two developed paranoid jealousy of their girlfriends, one had mild referential thinking, and one developed pronounced grandiose beliefs. All subjects (N=9) reported a remission of these symptoms within a few weeks after stopping steroids, but none reported psychotic symptoms, even at the subthreshold level, at any time during periods of no steroid exposure, a highly significant difference ($p=0.002$). All users who experienced psychotic symptoms were "stacking" between two and four steroids, including at least one orally active 17-alkylated steroid, such as methandrostenolone or oxandrolone (known to users as "orals") plus at least one parenteral preparation, such as a testosterone ester or nandrolone decanoate (known as "injectables").

Five subjects (12.2%) met *DSM-III-R* criteria for a manic episode during steroid exposure (except for the *DSM-III-R* exclusion criterion regarding an organic etiology for the symptoms). Eight others (19.5%) only narrowly missed a diagnosis of manic episode; i.e., they met all but one of the first three *DSM-III-R* criteria. No subject reported a manic episode, even at the subthreshold level according to the SCID, during periods of no steroid exposure. Both comparisons were statistically significant (N=5 versus N=0, $p=0.055$; N=13 versus N=0, $p<0.0001$). Ten subjects (24.4%) were "stacking" when they experienced manic symptoms, but three were taking methandrostenolone or oxandrolone exclusively.

Several examples illustrate the behavior of subjects whom we scored as manic or subthreshold manic. One 23-year-old man bought a $17,000 sports car while taking methandrostenolone. When he stopped the drug, he realized that he could not afford the payments and sold the car; a year later, during another cycle, he impulsively bought a $20,000 sports car. Another subject bought an old car and deliberately drove it into a tree at 40 miles per hour while a friend videotaped him. Another became enraged when the driver in front of him inadvertently left his directional signal flashing; at the next stoplight, he jumped out and smashed the offender's windshield. Many others described pronounced euphoria and grandiosity, believing that nothing in the world could hurt them. No subject described comparable periods of such behavior during periods of no steroid exposure.

Five subjects (12.2%) developed major depression, according to *DSM-III-R*, while withdrawing from steroids. One of them had a history of major depression before steroid use. To minimize such withdrawal effects at the end of their cycles, many subjects had used human chorionic gonadotropin, a hormone readily available illicitly, to restimulate their endogenous testosterone production. Two subjects (4.9%) developed major depression during periods of no steroid use.

When we combined the subjects who displayed a full manic syndrome with those who displayed a full depressive syndrome, we found that significantly more of our 41 subjects developed a full affective syndrome during periods of steroid exposure (N=9 or 22.0%) than during periods of no steroid exposure (N=2 or 4.9%) ($p=0.048$). The subjects' past psychiatric histories were unremarkable except for substance use: six (14.6%) reported prior alcohol abuse or dependence, and 13 (31.7%) reported other prior substance abuse or dependence, most commonly cannabis (N=7) and cocaine (N=5). No subject reported current substance abuse or dependence (other than steroids). Finally, one subject (a 40-year-old woman) reported a history of panic disorder. Her typical attacks occurred weekly but remitted promptly when she started using oxandrolone, 20 mg/day.

Seven subjects (17.1%) reported at least one first-degree relative with major affective disorder, but these subjects did not show a significantly higher frequency of affective or psychotic symptoms during periods of steroid exposure than the subjects not reporting such a family history.

DISCUSSION

Our findings must be considered descriptive rather than quantitative, since it is unclear whether our observations were representative of the experiences of steroid users as a whole. It is our impression that, despite our considerable efforts at recruitment, only a minority of steroid users were willing to be interviewed. Thus, we suspect that we were getting only a glimpse of a large underground subculture.

However, we were still able to achieve useful comparisons by using as a control value the frequency of psychiatric syndromes in the subjects during periods of no steroid exposure. This is a conservative approach,

since the null hypothesis would predict a higher risk of developing a psychiatric disorder during the longer portion of a subject's life in which there was no steroid exposure than during the shorter portion in which there was steroid exposure. Despite this effect, affective and psychotic syndromes were significantly more frequent during periods of steroid exposure.

Why are these psychiatric effects rarely reported in the literature? One reason may be that the doses of anabolic steroids routinely used by our subjects were frequently 10–100 times as high as those used in medical studies of these agents. The common practice of "stacking" as many as five or six drugs, including oral preparations, parenteral preparations, veterinary preparations, and other hormones (such as chorionic gonadotropin) may be responsible for psychiatric effects (as well as muscle gains) far beyond those witnessed in research settings. Second, our experience suggests that athletes are wary of revealing their steroid use to physicians. Hence, the psychiatric effects of steroids, although perhaps often witnessed, may rarely be identified as such by professionals. For these reasons, the psychiatric effects of anabolic steroids cannot easily be studied in the laboratory or clinic. Only by observing the effects of these drugs in natural settings, in the doses and combinations actually used by athletes, are we likely to better understand them.

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The CHAIRMAN. Dr. Langston?

STATEMENT OF DR. EDWARD L. LANGSTON,

Dr. LANGSTON. Thank you, Mr. Chairman. My name is Edward Langston, M.D. I am a physician specializing in family practice in Indianapolis, IN. I have also represented the American Academy of Family Physicians on the AMA Informal Task Force for Prescription Drug Abuse for the past 4 to 5 years. And I am also the chairman of the legislation commission for the Indiana State Medical Association and have been involved in numerous public policy kinds of decisions through the years.

The AMA is pleased to present this testimony concerning the issue of whether anabolic steroids should be scheduled under the Controlled Substances Act.

Mr. Chairman, the AMA recognizes and is concerned over the fact that steroid abuse is a significant problem. We believe existing laws prohibiting the nonmedical use of steroids should be strictly enforced. We believe a clear message should be sent to trainers, team officials and others that steroid abuse is serious business and will be dealt with strongly. We believe athletic associations shall continue to prohibit from competition athletes who use steroids to enhance performance.

We commend you, Mr. Chairman, on your activity in support of the Anti-Drug Abuse Bill of 1988 which we have supported with increased criminal penalties for the inappropriate use of anabolic steroids.

The adverse health effects associated with the use of steroids are not significant, include, among other things, temporary infertility, liver pathology, including abnormal liver function test, adenomas in hepatocellular carcinoma. In addition, as mentioned earlier, steroid abuse may result in increased irritability and aggressiveness.

However, steroids do have a place in medical care, and for the reasons I will now discuss the AMA must oppose the enactment of Federal legislation that would schedule steroids under the Controlled Substances Act.

First reason why the AMA opposes the enactment of Federal legislation to schedule steroid is our belief that the appropriate avenue for scheduling a drug into the Controlled Substances Act is through the established administrative process rather than by legislation.

Now, under this process the Attorney General, through the Drug Enforcement Administration is authorized to initiate proceedings to schedule or reschedule a drug or to remove controls on a drug.

However, before a scheduling action can be taken, the Attorney General must request a "scientific and medical evaluation" of the drug from the Secretary of Health and the Human Services through the Food and Drug Administration.

The FDA also makes a recommendation as to whether the drug should be controlled. And if so what schedule. If the DEA concludes that the information provided by the FDA constitutes "substantial evidence," that a drug has potential for abuse, it must initiate proceedings to schedule it.

If, however, the FDA recommends that a drug not be controlled, the DEA is not authorized to control it.

Now, this regulatory mechanism which utilizes the expertise of the FDA and DEA has proven to be a highly satisfactory means of reviewing and evaluating drugs for almost 20 years. Use of the legislative progress to schedule drugs would inappropriately preempt this well-developed regulatory program designed specifically to deal with scientific and medical issues.

The second reason why we oppose the enactment of Federal legislation that would schedule steroids under the CSA is that the medical facts do not support scheduling. First, anabolic steroids have an accepted use in the treatment of several medical conditions, including certain anemias, hereditary angio-edema, breast cancer, et cetera. Moreover, anabolic steroids can be used safely under medical supervision; thus, they do not satisfy the statutory criteria for a Schedule I drug.

Second, abuse of steroids does not lead to physical or psychological dependence as is required for scheduling under the other schedules of the CSA.

In addition, scheduling of anabolic steroids would not adequately address the problem of abuse of these drugs because it would not affect the major elicit sources of the drug, i.e., shipments from foreign country and from veterinary supply houses. Scheduling would curtail only the relatively small amount of abuse that results from diversion from illicit sources.

Finally, the AMA believes that appropriate and effective approaches to combat steroid abuse are available. One means which was included in the reasonably enacted Drug Abuse Act of 1988 is to increase the criminal penalties for the sale of steroids without a prescription. This approach would serve to deter the major source of steroid abuse, i.e., the widespread distribution of steroids through nonmedical channels.

In addition, local law enforcement officials, which have the responsibility of enforcing the act, are more likely than the DEA to have the resources and inclination to address steroid abuse.

Another effective means to combat abuse of steroids is to educate athletes, coaches and trainers concerning their harmful side effects. Many of these persons simply are unaware of the serious adverse effects of these drugs.

In addition, we acknowledge that physicians need to be made aware of the warning signals of steroid abuse so that they can better recognize, diagnose such abuse and counsel their patients not to use these drugs.

In conclusion, Mr. Chairman, the AMA recognizes that steroid abuse is a significant problem. We do, however, oppose the legislation that would schedule these substances under the Controlled Substances Act. First, the appropriate method for scheduling is through the established regulatory process. And second, anabolic steroids do not meet the statutory criteria for scheduling under CSA. And finally, there are appropriate approaches to address the problem of steroid abuse. These include enforcing the recently increased criminal penalties for selling steroids without a prescription and educating the public concerning the harmful effects of steroid abuse.

We recognize that there is enormous need and we support those kinds of processes that address it. We just feel that the vehicle of using the CSA is not the appropriate one at this time.

I would be happy to answer any questions you might have regarding our statement, Mr. Chairman.

[Prepared statement follows:]

Statement of the American Medical Association

to the

Committee on the Judiciary
United States Senate

RE: Scheduling of Anabolic Steroids

April 3, 1989

American Medical Association
535 N. Dearborn Street
Chicago, Illinois 60610

Department of Federal Legislation
Division of Legislative Activities
(312) 645-4775

Principal Points

of the

American Medical Association

to the

Committee on the Judiciary
United States Senate

RE: Scheduling of Anabolic Steroids

April 3, 1989

- The AMA recognizes and is concerned over the fact that steroid abuse is a significant problem. Steroids, however, have accepted medical use in the treatment of several medical conditions, including certain anemias, hereditary angioedema, and breast cancer. The adverse health effects associated with steroid misuse include: oligospermia; temporary infertility; gynecomastia and liver pathology, including abnormal liver function; cholestatis; peliosis hepatis; hepatic adenomas; and hepatocellular carcinoma. In addition, steroid abuse may result in increased irritability and aggressiveness.

- Anabolic steroids do not meet the statutory criteria for scheduling under Schedule I of the CSA. First, anabolic steroids have an accepted medical use in medical practice. Moreover, anabolic steroids can be used safely under medical supervision. Second, abuse of steroids does not lead to physical or psychological dependence as also is required for scheduling under the other schedules of the CSA.

- Scheduling of anabolic steroids would not adequately address the problem of abuse of these drugs because it would not affect the major illicit sources of the drug - shipments from foreign countries and from veterinary supply houses.

- The AMA opposes the enactment of federal legislation to schedule steroids under the Controlled Substances Act (CSA). The preferred and appropriate method for scheduling or rescheduling a drug is through the regulatory process already established by existing law. Using the legislative process to schedule drugs would inappropriately preempt a well-developed regulatory program designed specifically to deal with scientific and medical issues.

- The existing regulatory mechanism for drug scheduling, which utilizes the expertise of the Food and Drug Administration and the Drug Enforcement Administration, has proven to be a highly satisfactory means of reviewing and evaluating drugs for almost twenty years.

More appropriate and effective approaches to combat steroid abuse are available. These approaches include enforcement of the recently increased criminal penalty for selling steroids without a prescription, and educating the public concerning the harmful health effects of steroid abuse.

STATEMENT

of the

AMERICAN MEDICAL ASSOCIATION

to the

Committee on the Judiciary
United States Senate

Presented by

Edward L. Langston, MD

RE: Scheduling of Anabolic Steroids

April 3, 1989

Mr. Chairman and Members of the Committee:

My name is Edward L. Langston, MD. I am a physician specializing in family practice in Indianapolis, Indiana and I also an alternate delegate to the American Medical Association's House of Delegates. Accompanying me is Tom Wolff of the AMA's Department of Federal Legislation. The AMA is pleased to present this testimony concerning the issue of whether anabolic steroids should be scheduled under the Controlled Substances Act.

Mr. Chairman, it is important to understand that anabolic steroids do have an appropriate role in the treatment of several medical conditions, including certain anemias, hereditary angioedema and breast cancer. Moreover, they can be safely used by patients under medical supervision. Thus, while we are very much concerned with abuse of these drugs, we do not believe that the answer is to legislatively schedule them under the

Controlled Substances Act (CSA). We also believe that prior to any further legislation regarding steroids, a thorough evaluation should be conducted of the effect of the steroid provisions of the Anti-Drug Abuse Act of 1988.

Non-Medical Uses and Adverse Effects of Steroids

Anabolic steroids are synthetic androgens, or male hormones, that have been used and abused by athletes for more than two decades to achieve an increase in body mass, muscle tissue and strength. Steroids can easily be obtained on the black market through gymnasiums and mail order sources. Although their prevalence is difficult to assess accurately, their use is believed to be widespread at all levels of athletic activity. Steroid abuse is particularly common among athletes in strength sports (e.g., weight lifters, body builders, shot putters, and discus and javelin throwers). Increased use of anabolic steroids among weight-trained women athletes has been reported, and these hormones have a more significant effect on the muscular development of females than of males.

A number of adverse effects are associated with use of steroids. These effects include: oligospermia; temporary infertility; gynecomastia and liver pathology including abnormal liver function; cholestatis; peliosis hepatis; hepatic adenomas; and hepatocellular carcinoma. Anabolic steroid ingestion by athletes also is associated with an atherogenic blood lipid profile (e.g., elevated low-density lipoprotein cholesterol and decreased high-density lipoprotein cholesterol). In addition, increased irritability and aggressiveness may occur.

In women, steroids produce masculinizing effects (e.g., hirsutism, deepened voice, oily skin, acne, male pattern balding, and menstrual irregularities). In children, these drugs may accelerate pubertal changes and limit eventual adult height by causing premature skeletal maturation and closure of the epiphyses.

The adverse effects of steroids are discussed in a 1986 report of the AMA's Council on Scientific Affairs entitled "Drug Abuse in Athletes." A copy of the report is attached to our statement.

AMA Concerns

The AMA recognizes and is concerned over the fact that steroid abuse is a significant problem. Nevertheless, the AMA must oppose the enactment of federal legislation that would schedule steroids under the CSA for the following reasons:

- The preferred and appropriate method for scheduling or rescheduling of a drug is through the regulatory process already established by existing law;
- Anabolic steroids do not meet the statutory criteria for scheduling under the CSA; and
- More effective approaches are available to curb steroid abuse. One approach to deal with steroid abuse, which was adopted in the Anti-Drug Abuse Act of 1988 (P.L.100-690), is to increase criminal penalties for the sale of steroids without a prescription. Another approach is to educate athletes, coaches and trainers concerning the dangers of drug abuse, including steroid abuse. Both of these approaches are more appropriate and effective responses to the problem of anabolic steroid abuse.

Regulatory Mechanism for Drug Scheduling

The appropriate avenue for scheduling a drug under the CSA is through the established administrative process rather than by legislation. The CSA authorizes the Attorney General, through the Drug Enforcement Administration (DEA), to initiate proceedings to schedule or reschedule a drug or to remove controls on a drug. However, before a scheduling action can be taken, the Attorney General must request a "scientific and medical evaluation" of the drug from the Secretary of Health and Human Services through the Food and Drug Administration (FDA). The FDA also makes a recommendation as to whether the drug should be controlled (and if so under what schedule) or removed from the schedules. If the DEA concludes that the information provided by the FDA constitutes "substantial evidence" that a drug has potential for abuse, it must initiate proceedings to schedule it. If, however, the FDA recommends that a drug not be controlled, the DEA is not authorized to control it. Finally, if the data provided by FDA constitutes substantial evidence that a drug should be removed entirely from the schedules, proceedings for removal of the drug must be initiated by DEA.

This regulatory mechanism, which utilizes the expertise of the FDA and DEA, has proven to be a highly satisfactory means of reviewing and evaluating drugs for almost twenty years. No convincing reasons exist to forego this appropriate and workable avenue in favor of legislative scheduling. Use of the legislative process to schedule drugs would inappropriately preempt a well-developed regulatory program designed specifically to deal with scientific and medical issues.

Statutory Criteria for Scheduling

We believe that anabolic steroids do not meet the statutory criteria for scheduling under the CSA. The CSA provides that in order to be placed in Schedule I, a drug must have a high potential for abuse and have no currently accepted medical use in treatment in the United States. In addition, there must be a lack of accepted safety for use of the drug under medical supervision. In order to be controlled under one of the other schedules of the CSA, a drug must have some potential for abuse that could lead to physical or psychological dependence.

The medical facts do not support scheduling anabolic steroids under the CSA. Anabolic steroids have an accepted use in the treatment of several medical conditions, including certain anemias, hereditary angioedema, and breast cancer. Moreover, anabolic steroids can be used safely under medical supervision. Thus, they do not satisfy the statutory criteria for a Schedule I drug. Scheduling of anabolic steroids in Schedule I would deprive patients of the benefits of this therapy for their legitimate medical needs. Moreover, anabolic steroids should not be scheduled under any other schedule of the CSA since abuse of the drugs does not lead to physical or psychological dependence as is required for scheduling under the Act.

In addition, scheduling of anabolic steroids would not adequately address the problem of abuse of these drugs because it would not affect the major illicit sources of the drug - shipments from foreign countries and from veterinary supply houses. Scheduling would curtail only the relatively small amount of abuse that results from diversion from licit sources.

Alternative Approaches

The AMA believes that more appropriate and effective approaches to combat steroid abuse are available. One approach, which was included in the Anti-Drug Abuse Act of 1988 (enacted in November 1988), is increasing the criminal penalty for the sale of steroids without a prescription. This Act provides that persons who distribute steroids or possess steroids with the intent to distribute them without a prescription can be fined and imprisoned for up to three years (six years if the sale involves a minor). (Previously, the maximum penalty was imprisonment for one year and a $1,000 fine.) The law also allows courts to seize property used to support the illegal distribution of steroids and property purchased with the profits from the sale of steroids.

We support these provisions of the Anti-Drug Abuse Act. They should serve to deter the major source of steroid abuse - the widespread distribution of steroids through non-medical channels. In addition, local law enforcement officials, which now have the responsibility for enforcing P.L. 100-690, are more likely than the DEA to have the resources and inclination to address steroid abuse. Rather than create new problems by legislatively scheduling these hormones under the CSA, it makes a great deal more sense to allow this new law to address the issue of anabolic steroid use.

Another more effective means to combat anabolic steroid abuse is to educate athletes, coaches and trainers concerning their many harmful side effects. Many of these persons simply are unaware of the serious adverse effects of these drugs. In addition, physicians need to be made aware of the warning signals of steroid abuse so that they can better recognize

and diagnose such abuse and counsel their patients not to use these drugs. We have developed educational materials for physicians which include a discussion of steroid abuse.

Finally, we believe that the Postal Service should conduct a study to determine the extent to which steroids are advertised for sale in periodicals that are shipped through the mail. If the mails are a major source of promoting or providing steroids, further legislation may be needed to prohibit such activities.

Conclusion

The AMA recognizes that steroid abuse is a significant problem. We must, however, oppose legislation that would schedule steroids under the CSA. First, the appropriate method for scheduling a drug is through the established regulatory process. Second, anabolic steroids do not meet the statutory criteria for scheduling under the CSA. Finally, there are more appropriate approaches to address the problem of steroid abuse. These include enforcement of the recently increased criminal penalty for selling steroids without a prescription, and educating the public concerning the harmful health effects of steroid abuse.

Mr. Chairman, I will be happy to answer any questions you or other Members of the Committee may have.

REPORT OF THE COUNCIL ON SCIENTIFIC AFFAIRS

Report: B
(I-86)

Subject: Drug Abuse in Athletes: Anabolic Steroids and Human Growth Hormone (Resolution 57, A-86)

Presented by: John H. Moxley, III, M.D., Chairman

Referred to: Reference Committee E (R. Robert Tyson, M.D., Chairman)

This report, the first in a three-part series on drug abuse by athletes, responds to adopted Resolution 4 (A-84) and to Resolution 57 (A-86), "Human Growth Hormone," which was referred to the Board of Trustees for action. Subsequent reports will cover other classes of abused drugs.

Introduction

The problem of misuse of anabolic hormones (both steroids and growth hormone) is complex and can be considered from different perspectives:

(1) Psychological:

(a) The importance of winning;
(b) Placebo effect of drugs.

(2) Pharmacologic:

(a) The possibility that these hormones may provide a real physiologic advantage for the athlete;

(b) The adverse effects of such misuse.

(3) Ethical:

(a) The concept of violation of fair play;

(b) Implicit coercion to use drugs in order to be competitive;

(c) The concept of hormonal manipulation, particularly in children, to alter body size and build in a manner perceived to be beneficial for athletics or other life endeavors.[1]

Past House Action: A-86:371; A-85:282; A-84:334; A-79:277; I-79:45-47; A-79:277; A-72:261,384

General solutions to the problem range from prevention (eg, regulatory action limiting production and/or distribution of drugs) through symptomatic treatment (eg, drug testing of competitors) to cure (eg, motivation of the individual to reject drugs). The personal decision to reject or discontinue drug use is based on the individual's values and reasons for considering drug use. Hence, an ethical argument based on the concept of fair play may be ineffective in an individual who is motivated to win at any physical cost.

Anabolic steroids and growth hormone will be discussed separately. The following questions will be considered for each:

(1) Does the drug provide real or perceived benefit for the athlete?

(2) What are the adverse effects of the drug in this setting?

(3) Who promotes, distributes, and uses the drug?

(4) Is abuse of the drug a significant problem?

Anabolic Steroids

Anabolic steroids are synthetic androgens that have greater anabolic relative to androgenic activity than testosterone, but in large quantities, these drugs have strong androgenic effects. In general, they are not as useful and effective as earlier thought, but do have legitimate uses in several conditions (eg, certain anemias, hereditary angioedema, breast cancer, and possibly osteoporosis).

Anabolic steroids have been used by athletes for more than two decades in the belief that they increase body mass, muscle tissue, and strength. More recently, testosterone has been used because it is more difficult to detect in drug screening programs than anabolic steroids. Although studies of these agents have not shown uniformly increased muscular strength, certain benefits to athletic performance seem probable: increased body weight, partly due to fluid retention, may include increase in lean muscle mass. In a continuing program of intensive exercise coupled with a high protein diet, increased muscular strength may be realized in some individuals. In contrast, aerobic capacity is probably not increased beyond that due to aerobic training.[2,3] Increased aggressiveness is also reported among anabolic steroid users, but the degree to which this influences the intensity of training is unknown.[4] It should be noted that small, difficult-to-measure increments in muscular performance or psychological benefit may constitute the difference between winning and losing, particularly at a professional or world-class level. Therefore, these changes may be perceived to be critical to an athlete.

There are clear adverse effects associated with use of androgenic steroids. The doses and patterns of administration utilized by athletes often differ markedly from those used therapeutically. Athletes have been reported to take steroids cyclically for one to several months followed by a drug-free period up to a year. Doses may be far greater than those considered to be therapeutic, and drugs are sometimes "stacked" (several agents taken simultaneously).[5] Exogenous androgens affect the reproductive system of healthy males: gonadotropin and testosterone secretion are suppressed and oligospermia and temporary infertility may occur. Gynecomastia is common.[6] Agents that are 17 - alkylated compounds (eg, oxandrolone, methandrosteneolone) are associated with liver pathology, including abnormal liver function tests, cholestasis, peliosis hepatis, hepatic adenomas, and hepatocellular carcinoma.[7] Although hepatic effects have been described and documented most often in patients treated for disease, one case of hepatocellular carcinoma has been reported in an athlete who had taken several anabolic steroids to increase skeletal muscle mass.[8] Anabolic steroid ingestion by athletes is also associated with an atherogenic blood lipid profile (eg, elevated low-density lipoprotein cholesterol and decreased high-density lipoprotein cholesterol).[9] Increased irritability and aggressiveness may occur.

In women, androgenic hormones produce masculinizing effects (eg, hirsutism, deepened voice, oily skin, acne, male pattern balding, menstrual irregularities, increased libido). In children, these drugs may accelerate pubertal changes and limit eventual adult height by causing premature skeletal maturation and closure of the epiphyses.

Steroids apparently are used at all levels of athletic activity. Although the prevalence is difficult to assess accurately, such use is believed to be widespread.[10] Steroid abuse is particularly common among athletes in strength sports (eg, weight lifters, body builders, shot putters, and discus and javelin throwers). Use among weight-trained women athletes has been reported. Anabolic steroids have a more significant effect on female muscular development than on males. In one study, the women reported typical masculinizing side effects, which they considered an acceptable price for the anabolic benefits.[11] A particular concern is that the wide availability of these agents is likely to make them accessible to adolescents and children, as well as adults.[12]

Anabolic steroids are easily obtained on the black market through gymnasiums or mail order sources. In a survey of 250 weight lifters, almost half admitted using steroids at some time. Although most steroids were obtained illegally, some athletes claimed that they had been given a prescription for the drugs.[13]

In 1985, the Food and Drug Administration (FDA), Federal Bureau of Investigation (FBI), and Department of Justice (DOJ) began a nationwide criminal investigation of black market distribution of anabolic steroids and other drugs purported to enhance athletic performance. Manufacturers and distributors were advised of their responsibility to ensure distribution only to authorized customers and were requested to monitor and report unusual order activity (eg, large or frequent orders, orders by pharmacies for veterinary products). Indictments have been obtained as a result of this effort.

Growth Hormone

Human growth hormone (hGH) or somatotropin is a polypeptide hormone secreted by the anterior pituitary gland. GH has widespread metabolic effects, including stimulation of cellular amino acid uptake and protein synthesis, stimulation of lipolysis, and inhibition of glucose utilization in tissue, which tends to increase blood glucose levels. Growth hormone is necessary to achieve normal genetic growth potential. Severe deficiency in childhood results in dwarfism. Human GH is necessary to treat this condition, because GH from other species is ineffective.

Human pituitary-extracted GH was available from the National Hormone and Pituitary Program and commercial sources until 1985. After the appearance of several cases of Creutzfeldt-Jakob disease believed to have been caused by contaminated pituitary extracts, distribution of the product was halted voluntarily for an indefinite period. Following withdrawal of the pituitary products, a recombinant DNA-derived GH product was approved for marketing in the United States. It is identical to endogenous hGH except for the addition of methionine on the N-terminus of the molecule. This preparation is available commercially.

The results of hypersecretion of hGH are of particular interest in the context of this report. Uncontrolled hypersecretion in childhood results in gigantism, and in adulthood, acromegaly. The latter condition is associated with glucose intolerance, heart disease, impotence, and bony overgrowth (eg, protruding forehead and jaw, enlarged hands and feet).

Adverse effects of hGH use by athletes have not been documented but can be predicted on the basis of known effects of endogenous hypersecretion (vide supra). Whether limited exogenous administration may produce beneficial or deleterious effects in healthy athletes is unknown. The effect of hGH administration to normal children is unknown, but might be expected to produce a permanent increase in build and stature. Beyond the physiologic considerations, use in normal children is an ethical problem of far-reaching proportions.[1]

In contrast to the problem of anabolic steroid abuse, hGH abuse, to the extent that it exists, is a relatively new phenomenon. Reports of its use in athletes are anecdotal;[15] they suggest that hGH is currently favored because of anticipated body growth and increased strength potential and also because it is undetectable in current drug testing procedures. Use is probably limited by the great expense of the product.

The source of illicit supply is questionable. One physician reportedly obtained supplies of pituitary-extracted hGH simply by mailing prescriptions to companies supplying the product.[16] This account is inconsistent with the companies' stated distribution policies, which required screening of requests and documentation of need. Bogus hGH preparations, animal GH preparations, and foreign products should also be considered as potential illicit sources. To knowledge, there have been no reports verifying that the GH products bought by athletes are in fact hGH.

Since withdrawal of pituitary-extracted hGH from the US market in 1985, the only U.S. source of hGH is the recombinant DNA product. Although the technology to mass-produce hGH is available, the manufacturer states that it limits production and follows rigorous screening and post marketing surveillance procedures to verify legitimate use in GH-deficient patients.

In summary, the status of growth hormone abuse is undetermined, but the agent has wide abuse potential, particularly if pharmacologic benefits are shown to result from use in normal athletes. Human GH also may have additional legitimate therapeutic applications for other growth disorders, fractures, burns, and other conditions. Research in these areas has been hampered by the limited supplies of hormone available, but is expected to be undertaken in the future now that it is possible to produce unlimited quantities of the hormone. Increased availability of hGH for other legitimate uses presumably would increase accessibility for illicit use.

Conclusions

Abuse of anabolic products by athletes differs in the two types of drugs discussed. Anabolic steroids have therapeutic benefits for certain conditions and proven abuse potential among athletes. The abuse of hGH is a recent phenomenon of undetermined extent. Human GH has a clear therapeutic application in growth hormone deficiency and other legitimate investigational uses, and also has great potential for misuse.

This report responds directly to concerns regarding the abuse of anabolic steroids; future reports will deal with other classes of abused drugs. The report also addresses the issue of the abuse of human growth hormone, which was raised in referred Resolution 57

(A-86). Recommendations for AMA action will be developed after completion of all reports on drug abuse in athletes. The following possibilities will be considered in developing the recommendations:

1. Regulatory action (for anabolic steroids and growth hormone):

The AMA should continue to endorse current activities of the FDA, FBI, and DOJ directed toward curbing illegal distribution of these drugs. If these efforts are ineffective, the AMA should undertake a study of alternate methods of monitoring and limiting distribution.

2. Educational action (for drugs with abuse potential):

The AMA should endorse educational activities at various levels including sports group administrators, coaches, parents, and athletes. Activities suggested for consideration are:

a) Preparation and distribution of educational pamphlets on drug abuse in athletes emphasizing the adverse effects and limited benefits of such use.

b) Development of a nationwide network of physicians who would be available to give presentations on this topic to interested community groups.

c) Preparation of a videotape(s) on drug abuse in athletes for distribution and use by schools, sports programs, parent groups, and community organizations.

d) Judicious use of the news media and editorials and articles in AMA publications to publicize the AMA's interest and availability to work on this problem.

The Council on Scientific Affairs recommends the adoption of this report in lieu of Resolution 57 (A-86).

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The CHAIRMAN. I have a lot of questions, but I can see your two colleagues are raising their hands, Dr. Katz and Dr. Yesalis.

Dr. KATZ. I am the other M.D. on the panel, and Charles may have a position from his standpoint, that I realize this hearing is not the place or the time for a full debate.

The CHAIRMAN. Yes, it is. I can assure you it is the beginning of what will be a long debate. It is appropriate today and to put it to you bluntly, fellows, if you all can not get your act together and tell us what it is, then how do you expect lay persons like me or athletes like those ladies behind you to be able to make any sound judgments about their lives?

I am confused with your statement, Dr. Langston, and I am sure you will be able to amplify on it. On the one hand you say, the reason that you do not want to move in this direction is because there are no serious problems. And you say they do not lead to physical or psychological dependence. Yet the other hand you say this is a serious problem we have to deal with. If there are no harmful effects, psychological or physical dependency, and it is not a serious problem, why don't we just let them use it?

Dr. LANGSTON. May I address that?

The CHAIRMAN. Yes. I am going to ask you to do that and have Dr. Katz statement made and then a response, or whatever he wants to start the debate, and then I will be happy to have you answer that question.

Dr. KATZ. Let me take issue with a number of statements made by Dr. Langston with due respect to the AMA and to him, personally. I am a medical physician, an M.D. I find the statement shocking. I find it equivalent to the National Football League, you know, owner saying we care about steroids, we care about steroids for years and years and not doing anything about it.

First of all, opposing enactment of scheduling based on process of legislative or regulatory means as an issue, I guess, councils could take up, but I disagree with that statement as being good rationale for protecting individuals or addressing this issue.

On more medical grounds, let me point out to you that your comment that anabolic steroids should not be scheduled because there are accepted uses in medicine. There are many drugs that are scheduled that continue to be used for accepted uses in medicine. Morphine is scheduled. It is used all the time in hospitals. So that is a ridiculous argument.

Your next statement that there is no psychological dependence, using this as a statement stating that CSA has statutory requirement that they have psychological dependence or physical dependence I do not know where the AMA has given you information or where you have received your information that there is no psychological dependence. We have heard testimony today from one individual—of course this does not make a firm case, but the testimony that Diane Williams has given is very consistent with my research and other researchers in the field of psychiatry where one would expect that psychological dependence would be addressed. Again, that statement was inconsistent with my research.

Last week or 2 weeks ago Charles and I were at the National Institute of Drug Abuse attempting to address that very issue. And, at best which I will grant you, is that more studies need to be done.

But certainly nobody should make the statement that anabolic steroids are not psychologically dependent. I think most, if not all, anabolic steroid abusers who are willing to testify will come forth and say that they did find them psychologically dependent; that when they tried to come off anabolic steroids, they either got depressed, they lost their self-esteem; they felt that they needed to go back on them, or as Ms. Williams so eloquently stated today, just had all sorts of problems with believing clear realities about their own abilities or their own appearance. That is part of what psychological dependence is all about.

Third, or fourth, the fact that the AMA would use an argument that we should not regulate or schedule these steroids because it would only stop a small percentage, that argument has been used again and again about other drugs and I am surprised to hear it coming from the AMA. Because what we are concerned with is not necessarily just the result of how much we would to stop. That is not a reason to do it or not to do it. But with the message that that is being given by our government.

The CHAIRMAN. Dr. Yesalis?

Dr. YESALIS. Yes. Well, as the epidemiologist on the panel, I would like to comment on the issue of psychological dependence. We did a study. It was part of our adolescent study and you have a copy of that and I submitted that, which is really the first study to show behavior, opinions, attitudes by adolescent users that is very consistent with the definition of psychological dependence. What happens with these drugs is when people are on the drug, they feel, they experience increased strength. They feel increased capacity to train. They feel a sense of euphoria, feeling of well-being. And when they go off the drug, those things diminish or disappear and they recycle on the drug.

Beside that research, several of my colleagues and I have interviewed several hundreds of users and our experience has been we have all seen, I think we have viewed psychological dependence on these drugs.

In addition, and we do not have any hard evidence on this, but at the NIDA conference, the idea or the potential for physical dependence on this drug was raised. Before that conference, I never really thought about that. But several of our colleagues or endocrinologists pointed out that androgens, anabolic steroids, stimulate the opioid pathways and the central nervous system. And there was some other research that was presented which would make it very reasonable to hypothesize physical dependence on these drugs. And there is one case study that was done by Drs. Tennet, Black and Voy, which showed opioid-type withdrawal from these drugs.

The last thing I would like to mention is that by the DEA's own estimates, that 40 percent of anabolic steroids are diverted from ethical drug houses. And if that is not a reasonably large percent, then I apologize. But that is quite substantive to me. And my seat-of-the-pants arithmetic in epidemiology shows I calculated last year, being very liberal with the conditions for which these drugs are used where you could prescribe them, I would say $30, $40, $50 million of legitimate use existed and we imported last year, imported, not produced, but we imported over $167 million of steroids into this country.

The CHAIRMAN. Dr. Langston, you were going to comment on my question which is, if they are not a serious problem, why worry about their use? And then you can comment on anything you would like, which was mentioned.

Dr. LANGSTON. If you understood that I said it was not a serious problem, that is an error on my part because I wanted to convey to you——

The CHAIRMAN. Could be I misheard it.

Dr. LANGSTON. Then we agree that it is a very serious problem.

The CHAIRMAN. Why? Why is it serious?

Dr. LANGSTON. Well, you heard the litany of testimony today because of its adverse effects, because of the implication of ethics with regard to competing in athletics at all levels, and also because of one study. There are a number of things would like to address. For instance——

The CHAIRMAN. Excuse me. Before you go on, I just want to make sure I understand your basic premise. You believe it is a serious problem because of the adverse effects we heard about today; correct?

Dr. LANGSTON. Correct.

The CHAIRMAN. And I understand that the AMA is perfectly, and any doctor here, is perfectly at liberty to comment on the ethical questions about competition. But we are asking you to be here because you are doctors, not ethicists and nor have my professional law nor yours been particularly astute at that subject.

I would ask you all, if you can, as best you can, focus on the medical issue here. And again, if the side effects that you have just said were reasons to view it as a danger, why not outlaw it? I thought you said those side effects did not exist. I am confused. We heard testimony today. We heard testimony from a woman who said physically she had serious problems and she had psychological problems and you just referred to them as evidence as to why we should outlaw them. Do you believe there are those serious physical side effects; that is, everything from growing of facial hair to enlargement of the—anyway, do you believe they exist?

Dr. LANGSTON. I think the side effects of anabolic steroids have been documented and we mentioned a very few of them here in our testimony with regard to "certain cancers of the liver, abnormal liver function test." You have heard about the acne. You have heard about stimulation of——

The CHAIRMAN. Does the AMA agree those are side effects?

Dr. LANGSTON. But those are side effects, as we have side effects profiles on any medication that we use. Our contention is that we are locking at an issue of how do we combat the problem of the inappropriate use of anabolic steroids? And I think that we are not so necessarily far apart at all with regard to, one, the seriousness of the problem; and No. 2, how do you combat it, which is one of the processes that you are addressing. We look at, for instance, a controlled drug is defined by the CSA as one that has the potential for abuse with regard to dependency, for instance. Schedule I is a list of drugs that are not available for use in the United States because there is no medical reason to use them. And anabolic steroids does not fit that classification because there are reasons that we can use them.

If you look at the other schedules, it has to do with dependency, factors of those drugs. And the research of Dr. Katz and Dr. Yesalis are conducting at this time is something that we desperately need. We are basing our position based on the information at hand that we have today in the medical literature. As that changes, we obviously see trends and those positions need to be changed. That is one of the ways that we change those position when, in fact, we have the information that would support that. And we personally and collectively applaud the efforts of Drs. Katz and Yesalis. The paper that Dr. Yesalis talked about that was published in the December issue of the Journal of the American Medical Association is probably one of the first and most comprehensive surveys done in the United States in high school athletes and it is rather disturbing. I think you have quoted some of those figures.

And one of the difficulties that we found in this AMA informal task force that was started approximately 1981, with both medical and other ancillary organizations involved in it, was trying to address, initially, first of all, what we technically called controlled drugs, which are the classic: the narcotics, the stimulants, and the barbiturates. And that is the way they are defined in the Controlled Substances Act. And we looked at the anabolic steroid issue at least 3 years ago and we found a paucity of research and that is essentially what Dr. Katz and Dr. Yesalis are documenting. And we applaud their efforts and we await those kinds of results. As we do with any scientific information if, in fact, that information then suggests that you need to change policy, we use that. That is why we are interested in the information. I think from a policy, public policy prospective, and that is where we are coming from on this particular issue, is that with what we have documented in front of us, the scientific information, traditional with anabolic steroids would not fit that. What we may, in fact, be finding and they may be documenting and proving, then, to the medical community that that may have to be reviewed and changed. And if it is, then we have to make appropriate changes

The CHAIRMAN. Is there any circumstances under which the prescribing of anabolic steroids would be justified as it relates to the enhancement of physical appearance or the enhancement of physical athletic capability? Is there any justification or any circumstance for that?

Dr. LANGSTON. The AMA will be publishing here very shortly in the AMA Drug Evaluation and the statement in there is the, to cover that, that the use of anabolic steroids to improve athletic performance is universally deplored in the medical community.

The CHAIRMAN. But would the AMA object to my introducing and enactment of legislation to see to it that a doctor would go to jail for 6 years for doing that?

Dr. LANGSTON. I think that we would have to take a look at the legislation. But may I just share with you something——

The CHAIRMAN. Why would you have to take a look at the legislation?

Dr. LANGSTON. Just like any legislation, I want to see what the exact words are. We are against the use of anabolic steroids to enhance athletic performance to increase bulk. Let me show you——

The CHAIRMAN. But are you for doctors going to jail if they do that?

Dr. LANGSTON. Let me share something with you that we did here in Indiana, if you may.

The CHAIRMAN. Sure.

Dr. LANGSTON. We looked at this issue, and in 1986, supported, and there is a consensus, we have an athletic committee that works in concert with the Indiana High School Athletic Association. We helped draft and support, and this was within Indiana, a law that addressed this very specific problem in two ways. One, it is unlawful for a person to possess or use an anabolic steroid without a valid prescription of drug order issued by a practitioner acting in the usual course of the practitioner's professional practice. There is another caveat. This is what we did in Indiana. And the AMA, I am not speaking for them, but I am telling you what we did there would be something that when something occurs, we can certainly respond to that. It is unlawful in Indian for a practitioner to prescribe, order, distribute, supply or sell an anabolic steroid for enhancing performance in an exercise, sport or game. And there is some other things. I think that is fairly definitive, Mr. Chairman, on what we did in Indiana. And that is why I chose to tell you my involvement in that organization and that we have taken those stances based on what we think were some evidence that supported that issue and developed a consensus.

The CHAIRMAN. So you personally think there is sufficient evidence to make it unlawful for a physician to prescribe the use of anabolic steroids for the enhancement of the—read the words you had there.

Dr. LANGSTON. For the enhancing performance in exercise, sport or game, hormonal manipulations intended to increase muscle mass, strength or weight without a medical necessity. I support that. And we did the very same thing that occurred at the Anti-Drug Abuse Act that you supported in 1988. We made a distinction on that, if, in fact, it involved someone under the age of 18 it became a felony, not misdemeanor. And it went from a Class C in Indiana to a Class B. And I have to admit my ignorance as to specifics of that, but there is a significant difference between a felony and a misdemeanor.

The CHAIRMAN. Yes. You go to jail longer.

Dr. LANGSTON. That is right.

The CHAIRMAN. Among other things.

As the official representative of the AMA, so I do not have to write them a letter, would you tell them I would like to formally inquire—I assume you are here as the representative. We asked for someone to be sent because this is your area. You represent them. I would like to formally request, before I write and introduce such legislation, an opinion from them as to whether or not they support the notion of criminal penalties for physicians prescribing anabolic steroids for the purposes that you set out in the legislation you read from Indiana.

Dr. LANGSTON. I will carry that message, Mr. Chairman.

The CHAIRMAN. I appreciate it.

Now, do either of your colleagues believe that anabolic steroids should be a controlled substance; that there is enough information to make that judgment now?

Dr. YESALIS. I do. I believe they should be a controlled substance. I would recommend a BF Schedule V, and not to interfere with the physician/patient relationship, but simply make the drug companies and the wholesalers keep records. Because clearly drug companies will not even tell us how much they are producing. The only figures we could come up with is what is being imported. And clearly one could argue that they are purposefully overproducing. The same argument was made years ago with amphetamines. And some way, somehow these drug are leaving the ethical drug houses or wholesalers and getting into the black market.

Now, one would argue that if all these drugs were being hijacked and the drug companies were not being paid for them, that they would likely do something about that, cut back production. I am just assuming they are getting paid for them in some way. And at the pharmacy level, at the wholesaler level, at the manufacturing level, somebody is keeping sloppy records and not paying attention where large volumes—I believe the latest estimate by DE was 4 to $500 million black market, where large volumes of these drugs are being diverted.

The CHAIRMAN. I did not hear the last comment.

Dr. YESALIS. I think it is very clear that large volumes of these drugs are being diverted. I am sufficiently convinced that there is a reasonable amount of evidence that supports psychological dependence that that would be the scheduling of this substance, which 4 states have done already. I believe California, Florida, Alabama and North Carolina. Scheduling at the Federal level would be major help.

The CHAIRMAN. Excuse me one moment.

[Discussion off the record.]

The CHAIRMAN. I wanted to check on the status of something. I had, in last year's legislation, written a provision to try to deal with the concern you have, Dr. Yesalis, and that is how much is being produced. And I asked the GAO to do a study, but we do not have the results of that yet.

Dr. YESALIS. I have been working with them, but they just told me the drug companies have not been too cooperative.

The CHAIRMAN. Yes. I do not doubt you. I do not know that, though, at this point.

And Dr. Langston, the AMA's more precise, objection to making anabolic steroids a Schedule I drug is that it makes it unlawful to use the drug, under any circumstances, prescriptive or otherwise. But Schedules II through V still allow drugs in those categories to be prescribed, but they have various penalties for other consequences, other uses.

Dr. LANGSTON. Right.

The CHAIRMAN. And your objection is also to have it fall within any category of a controlled substance, I through V; is that right?

Dr. LANGSTON. I think it is a definition technicality and CSA has the rigid criteria to be considered. And one of them is proven dependency. Now, if that is proven through the literature that you have the potential for dependency——

The CHAIRMAN. I do not think that is the case. I think it says potential for abuse. It does not say proven dependency. I may be mistaken. That is the other question I have been asking here. I do not remember that being the terminology, but if you have it in front of you, it would be useful for us to find out now. The staff with you or one of your colleagues may have it. It would be helpful because I do not have it in front of me and I apologize.

Dr. LANGSTON. I can read this for you to clarify that if that would be helpful, Mr. Chairman.

Schedule I: The drug——

The CHAIRMAN. We know Schedule I. Let us go on.

Dr. LANGSTON. Schedule II, for instance. The drug or other substance has a high potential for abuse.

The CHAIRMAN. Yes. High potential. Not proven dependency; correct?

Dr. LANGSTON. Abuse of the drug or other substances may lead to severe psychological or physical dependence.

The CHAIRMAN. May.

Dr. LANGSTON. May.

The CHAIRMAN. So there is a big difference than proven dependency. First two words you read, would you read them, again? Has a high potential? That is the phrase; right?

Dr. LANGSTON. Yes. The drug or other substance has a high potential for abuse, which is one criteria

The CHAIRMAN. All right. And the second? This is all Schedule II? There is two criteria: has a high potential and may——

Dr. LANGSTON. There are three criteria, one of which it does have a currently accepted medical use in the United States. The third, it reads, "The abuse of the drug or other substances may lead to severe psychological or physical dependence."

The CHAIRMAN. Right. That is the only point I wanted to make. And I apologize for not having it in front of me. The phrase that you were using is that it need only have a high potential for abuse, and not a proven dependency. And they are gigantic differences in the law, as you know.

Dr. LANGSTON. Sure. And I think what my colleagues were saying up here, that in the past they have not been considered in that classification at all. I think that might be reasonable.

The CHAIRMAN. There is no fact it may have been considered. Is it the AMA's position that there is not a "high potential for abuse"? Do you need any more evidence that there is a high potential for abuse than to look around the country and ask why the NFL is passing these laws and why high school coaches are here? Does anybody in the AMA doubt that there is a high potential for abuse?

Dr. LANGSTON. I do not think there is any doubt there is high potential for abuse, which is one of the three major criteria.

The CHAIRMAN. I just want to take them one at a time.

Dr. LANGSTON. Sure.

The CHAIRMAN. The second one is that it may cause dependency. Is it the AMA's position that it does not cause dependency? Is that what you are saying to me here today?

Dr. LANGSTON. What I am saying is I think the medical literature is developing in that area and that we do not really have that, necessarily, at hand from multiple sources to substantiate it.

The CHAIRMAN. But the AMA sent you here to make the specific legal case about, A, how the process works for categorization; and B, what specifically is required. I just want to make sure I understand the AMA's position, which sometimes I do not.

The AMA's position is that they doubt that it causes dependency. Is that what you are saying to me?

Dr. LANGSTON. What I am saying is that they have—we are in the process of evaluating that position and the facts remain about steroids, as I recall, I do not recall seeing a specific policy statement to say that we say that it may cause that or it may not. What I am saying is that part of that position in literature may, in fact, be changing, Mr. Chairman.

The CHAIRMAN. I understand it may be changing. The AMA's argument is, Biden, don't go off and classify this as a controlled substance, any control, I through V. And there are two reasons according to the AMA, why not to do that. One, it is not the proper procedure. Let it go through the established route from the Attorney General and the FDA and so forth. That is one argument you are making; is that correct?

Dr. LANGSTON. That is one argument, yes.

The CHAIRMAN. Not, very legalistic, but an understandable argument.

Second argument you are making is that it does not meet the requirements of the law as it is now written. Separate and apart from the issue of whether or not I circumvent the process, which, by the way, we have full legal authority because we write the FDA's legislation.

But then you are saying a second thing to me. The AMA is saying we do not have enough evidence to meet the existing written criteria under the existing Controlled Substances Act. That is what you are saying; is that not correct?

Dr. LANGSTON. I think that is correct, yes, sir.

The CHAIRMAN. I do not know how the AMA can say that if the existing Controlled Substances Act says for a drug to be a control II substance, it has to meet three criteria, and two of those three are high potential for abuse. They are the words, phrase. High potential. And the second is may cause.

Now, my question is a simple one. If the AMA saying with certainty, that it does not meet the existing criteria, then the AMA must be saying to me one of two things: either the AMA does not believe it has a high potential for abuse, or the AMA does not believe that it may cause abuse. And that is what I am trying to get at. Are you saying both those things to me?

Dr. LANGSTON. What I am saying is that at this point, in particular, your reference to it may cause dependency, severe psychological or physical dependency based on the information at hand and established literature and a number of studies to support that, it is our interpretation that it does not meet that criteria.

The CHAIRMAN. That it does not reach the level of "may."

Dr. LANGSTON. That is right. And if that changes, then, obviously, we are willing to look at that, sir.

The CHAIRMAN. OK. I just want to make sure I understood the position.

Dr. LANGSTON. That is my understanding.

Dr. Yesalis?

Dr. YESALIS. At that National Institute on Drug Abuse technical review, we are putting together a monograph, which is a result of that, and one of the chapters will be on psychological dependence. And if it helps, I can guarantee you that the conclusion of that chapter, because I am writing it, it will say these drugs, there is a potential link between using these drugs and psychological dependence. They may cause psychological dependence. That is what will be concluded in that monograph.

The CHAIRMAN. I guess we will wait to see that and other things that may come forward.

Dr. YESALIS. That will be out May 1.

The CHAIRMAN. We just want the facts.

Go ahead, Dr. Katz.

Dr. KATZ. The other thing I point out is what you have all been discussing has been Schedule II. We are not even talking about Schedule III, IV, V.

The CHAIRMAN. I agree.

Dr. KATZ. You are talking about the most severe outside of Schedule I.

The CHAIRMAN. That is a valid point. Schedule V merely—go ahead.

Dr. KATZ. The other thing you had asked both Dr. Yesalis and I whether we supported scheduling and Dr. Yesalis has announced yes and I wanted to add answers that I, as well, clearly would support that.

One thing we need to remember is still under estimates in this country, the latest estimates are that 20 percent of the anabolic steroids used in this country coming from doctors prescription pads. Twenty percent. Now, I am glad it is not 80 percent and that the statistics are the other way around. But it still is estimated 20 percent are coming from our own licensed physicians.

Further, the analogy Dr. Yesalis made to amphetamines is absolutely accurate. In talking to the head of the National Institute of Drug Abuse at this meeting we attended, he spoke of the exact same thing that is happening with the anabolic steroids, that companies knew that doctors were using amphetamines, say, in the 1950's, $50 million worth for legitimate purposes, yet they were producing $25 million worth. Now, it does not take a genius to figure out why would they do that? They would not do it so they would have $200 million sitting around in stock piles and they continue to do it each year. The same thing is happening with anabolic steroids. Legitimate companies are way overproducing. They are not fools. They are not doing it so they can keep them in boxes somewhere.

The CHAIRMAN. Dr. Langston, maybe we can get something we can all agree on—tell us what some of the legitimate uses of anabolic steroids are. For what treatments? You said to treatment impotence; is that correct?

Dr. LANGSTON. It can be if it is part of the——

The CHAIRMAN. Not all is——

Dr. LANGSTON. There is certain conditions, hereditary angioedema, certain breast cancers, certain anemias.

The CHAIRMAN. One of my concerns is to get out accurate facts to trainers, athletes and others on the consequences of steroid use. Right now, we are not sure. We are in the "may" category from some believing it is harmful, to others believing there is not sufficient proof to indicate that steroids "may" be harmful.

What about the issue that was raised earlier in the testimony about impact on sexual drive? Sexual appetite? Sexual performance? What is the medical evidence relating to that?

Dr. YESALIS. Initially again, none of this has been studied terribly well, but initially there is an increase libido reported by some people and the long-term users tend to report decreased libido.

Dr. KATZ. That has been studied and it would corroborated what Dr. Yesalis just says.

And in addition, I might add that the uses, which I think is very important that you get down, whether you get them out of the PDR, get them from Dr. Langston and myself, there are fewer and fewer accepted uses for anabolic stercids. And impotence, basically, is not one of them. It has been used by urologists, but secondary to testicular shrinkage and to actually decrease libido in the long run. It has not been effective. That does not mean it has not been used. And it has been standard practice to use this as an attempt for treatment of impotence. But it has not been successful.

The CHAIRMAN. I am confused because on the one hand, you talk about decreased libido, decreasing sexual drive, and on the other hand it increased sexual drive.

Dr. KATZ. Your confusion is shared by those in the field that study it. What we find from talking with users is that there are some users, even long-term users that actually have increased sex drive, have somewhat aggressive sex drive, have hyperactive libidos and others that do not. That is not surprising. Many drugs have conflicting effects. Some decrease appetite in some people, increase it in others. But appears to be the case with the anabolic steroids.

The other thing I just wanted to interject is we need to keep in mind, as I hear some of the athletes behind us whispering, and accurately so, that these are not just human preparations that are being used. I do not know if the committee is aware of this, but veterinary preparations are being widely abused by athletes, as well, and I did not hear anybody today discuss this and I wanted to point that out.

The CHAIRMAN. You mean veterinary preparations, that is, preparations that vets prepare for the purpose of administering to animals?

Dr. KATZ. Exactly. Anabolic steroids that are used for horses are being widely used by humans, abused.

Dr. LANGSTON. Mr. Chairman, to comment on that, I think that the legitimate point is being made and you are feeling that ambiguity of the information that is available and I think that is where we are at this particular issue. And as I said before, I, personally, and AMA, collectively, appreciates the work that Drs. Yesalis and Katz are doing because they are marching into an area where we do not have a lot of that information. Our point is that we would like to make these decisions to accomplish the ends that all of us, I

think, want to reach based on information that is at hand. Our concern is whether CSA is the appropriate vehicle and you are going to be making those kinds of discussions. We would discuss that CSA is not the appropriate vehicle. If information changes to alter that position, I can assure you we will review it and changes with it if that is the way to go. And that is our major concern.

I would like to emphasize that we are not here in a negative mode whatsoever. What we are trying to say is, technically, we do not think that is the vehicle we want to go with. We think this will have to be developed with public hearings such as this. We are happy to be a part of it. And hopefully can educate those who might think that we are in here negatively as to our position and the reason. In this frenzy of activity, which we commend you on coalescing and visualizing and highlighting, we just want to make sure that the information is at hand so that we would not have to come back later and readjust something or create an embarrassment which we could not live with. And we know by stating that we put ourselves in this unfortunate position of appearing negative, when, in fact, I think what we want to do is be very proactive. And I would like to get that message across. That is where I think we are coming from. And we appreciate the opportunity. We appreciate the questions that you have. They are legitimate to us. Why are you taking that?

And I think what we have said here collectively today is that we are starting to develop the information. We would like to see that as much as you would so that in your position, which is one of public policy, you can help solving what we think is a verging problem that is affecting people collectively and individually as we have seen here today. That is our position. I will be more than delighted to take your inquires back to the AMA

The CHAIRMAN. With all due respect, Doctor, I think you have communicated well and very articulately the AMA's position. But I do not think the AMA has communicated a concern about this problem. As a matter of fact, I come away with a very sour taste in my mouth about the AMA on this. And I must tell you very bluntly. When I read these articles in the news print about I have come out of the hospital after some serious operations and I am now a changed man, but I am not so changed that I still have not learned to be silent. I can not help but be blunt. I am really surprised by your testimony.

But let me say, I assume, in the last question, these two posters here. I assume the AMA would suggest should not be used, then? I mean, they are, in a sense, kind of false advertising. One is put out, "Steroids mean trouble." Read the facts on this poster. It is on the back. I am trying to figure out who put this out. Department of Education? The Department of Education put that poster on. And then on the back of this, which is not on the back of this, there are a number of facts, quote/unquote, about how bad they are. And obviously, that communicates the fact that football players die or get seriously injured or collapse or do something bad when they take steroids. Something bad happens to them. And I assume the AMA would suggest that was a waste of the Department of Education's money.

And this one, also, is done by the Department of Health and Human Services, another department. And it says, "Using steroids is not worth the risk. I have tried them and I have seen the harm they can do. They have no place in the training table."

Do you think we should be doing things like this? Does the AMA think the government should be putting posters out like this?

Dr. LANGSTON. What I think the government is doing at that particular—using those posters there is advocating that the inappropriate use of medications is not right. And the AMA is on the record of being opposed to the inappropriate use of medications. And that is another one.

The CHAIRMAN. Does the inappropriate use of steroids cause those kind of problems?

Dr. LANGSTON. We are talking about dosages that are ten to 20 times above therapeutic levels used over extended periods of time and they do cause those kinds of problems. That is documented, sir.

The CHAIRMAN. I would ask for the record that the AMA will submit what an appropriate dosage would be that would not cause those kinds of problems—and we will be happy to give you a copy of both these little pamphlets that on the back, as well as the front, tells you what it says and what the negative request be. But I will submit that question in writing to the AMA.

Anyone of you would like to make a comment in closing?

Dr. YESALIS. I would, Senator. I head the group of experts in this area, been the convener for this group across the United States. Since the last 5 years we have attempted to obtain funding to study the long-term health affects of these drugs. We do not know the long-term health affects of these drugs and that is not even been done. There has been no longitudinal study done, even with patients, for most part. There is mainly case studies, anecdotal information. And as I said, the short-term health affects are transitory. And what happens to someone down the road, whether that poster is accurate or not, I do not know. You are just playing Russian roulette. And whether a particular dose is safe, I do not know. And I think the thing that strikes me most is that experts in this area have been saying that for two decades. And I find that rather disturbing that we are, I think, by consensus, have an epidemic of use and we are still telling people, I do not know.

The CHAIRMAN. It surprises me. I am not making any judgment on it. I do not pretend to be an expert in any of this. But it really does surprise me that there is both the lack of either effort to find out the effects and a lack of consensus on what has been found. It is a significant occurrence that is taking place in this country.

The one thing I fear the most, and the reason why I would like a lot more discussion on this, is sending misinformation to people. I think the biggest mistake we make and have made on the drug issue, beginning back in the 1960's, is telling young people that certain things would happen to them if they did certain things. Back in the 1960's you would go sterile, blind and a number of other things if you smoked marijuana. They did it. They saw people that did it. Nothing happened. They said, well, I guess nothing wrong with this. And now long-term studies are coming out with the very serious detrimental effects of the continued use or sustained use of marijuana.

Not too long ago there was a lot of discussion about cocaine and it became the drug that we should not worry about. It is not addictive, so it is okay. The law did not say that, but the information that the government and others put out did. And I hope in attempting to solve this problem, I have not become inadvertently a part of false advertising, which I think is the one thing that ruins the credibility of any education program on this use of this synthetic substitute or anything else that we come up with.

I thank you all for taking the time to come here. I can assure you it will be not the last you will hear from us. We need your help badly and I thank you.

I thank our stenographer.

The hearings will be continued later this month in Washington. And with that, we will adjourn this hearing.

[Whereupon the hearing was then adjourned at 1:55 p.m.]

STEROIDS IN AMATEUR AND PROFESSIONAL SPORTS—THE MEDICAL AND SOCIAL COSTS OF STEROID ABUSE

TUESDAY, MAY 9, 1989

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
Washington, DC.

The committee met, pursuant to notice, at 10:02 a.m., in room SD-226, Dirksen Senate Office Building, Hon. Joe Biden, chairman of the committee, presiding.

Also present: Senators Kohl, Thurmond, Specter, and Grassley.

OPENING STATEMENT OF CHAIRMAN JOSEPH R. BIDEN, JR.

The CHAIRMAN. The hearing will come to order, please. The press is ready, so I am ready.

By the way, for those of you at the witness table and the back, let me explain that I turned to Senator Specter and said, "You ready, Arlen?" He said, "I'm ready, Joe." And the press, in unison, said, "We're ready, Joe." [Laughter.]

The Metroliner was almost on time, and I apologize for being just a few minutes late.

We have a very distinguished group of people today that are here to help us in this further look at the problem and concerns about steroids.

The Senate Judiciary Committee today is holding the second in a series of hearings on the steroid abuse problem in America, focusing on the use of steroids in college and professional football today.

I might add that we are going to have additional hearings with body builders and weight lifters and, hopefully, the governing bodies of amateur athletics. It is also possible we will hear from the insurance industry who have a point of view on this issue.

Several of my colleagues have asked me why we are continuing to focus on this problem, and they cite, and quite correctly, that cocaine and crack in America has become an epidemic and that it is sweeping rural and urban areas around the country.

My answer has been simple and direct: First, steroid abuse is already a problem in America. Approximately one million Americans use steroids, and it is argued, and not yet sustained, that close to half of the high school students competing use steroids. I am not sure that is an accurate figure, but it is one that is being used.

And according to Federal officials, steroids have become a $300 million to $400 million illegal industry, with major drug traffickers playing a very active role in steroid smuggling and trafficking.

In my view, we did not focus enough—and I was here, so I am part of the problem—we did not focus enough attention on the cocaine problem in the late 1970's and early 1980's, with some disastrous results. And it seems to me we should not make the mistake on this issue.

Second, I suggest that using drugs to improve athletic performance undermines our most basic notion of the value of honesty, discipline, and hard work as the means of achieving success.

You know, it was said earlier—and the press knows I always give people credit for whatever they have said in the past—but it was said by someone other than me that the empire was built on the playing fields of Eton.

Well, the fact of the matter is that we, as Americans, have always viewed sports as justified, in large part, because of what it teaches our young people, about other things than a ball or a glove or a bat. It is supposed to teach them about themselves and about working with other people.

And quite bluntly, the thing that disturbs me most about this issue beyond the health effects, as bad as they are, is this notion that we are undermining the very raison d'etre, the very reason that sports play such a major role in America, particularly among our young.

I have recently seen "The Field of Dreams." You ought to go see it; it is a great movie. Part of what it is about is not baseball, but it is about dreaming. But how does a young man or a young woman dream those dreams when they are young if in fact the whole dream can be corrupted by the idea that something other than your natural ability and your hard work will be the reason for whether or not you succeed or fail.

Tens of millions of Americans learn about their values through sports, and if the lesson they learn is that the field is a place where you are to take shortcuts for success, where you pay little penalties for taking those shortcuts, whether it is using drugs or cheating or anything else, then it seems to me we are promoting attitudes that are directly at odds with our basic values.

Unfortunately, in my view, steroid use is widespread at virtually every level of amateur and, I suspect, professional sport from high school to college stars to the elite circles of pro athletes and to Olympic medalists whom we heard from earlier who indicated that in fact it was prevalent there.

College and professional football have not been immune from the problem. In fact, steroid abuse in football may have reached proportions that we have not acknowledged in the past. And that is one of the reasons for the hearing today.

Many current and former NFL players, including Bill Fralic and Steve Courson will testify today, and these two individuals—and they are two I acknowledge—estimate that 50 to 75 percent of NFL players have used or are currently using steroids. And similar figures have been cited by some major college football players.

I just should point out the figures in the polling done in high schools and at the NFL level indicate steroid use at about 6 percent.

But what is most troubling to me, is that the steroid problem in sports has been recognized for many years and we seem not to

have moved as rapidly on it as we should, but, hopefully, we are moving now.

In Olympics, the zeal of athletes, coaches, and national officials to bring home the Gold has created an environment that has tolerated, if not condoned, steroid use, according to the first panel we had here of Olympic stars.

And in professional sports, the millions of dollars paid to winning athletes, coaches, and team owners may have caused a similar attitude, but one that we are going to discuss today, if it exists at all.

The fact is that sport governing bodies, coaches, and trainers, along with the athletes, have responsibility in dealing with this problem.

Last month we chaired a hearing on the use of steroids by Olympic athletes, as I mentioned earlier. And in some of the most dramatic testimony that I have heard in the 17 years I have been a U.S. Senator, athletes described how the win-at-any-cost mentality had led doctors, coaches, and athletes to both prescribe and use steroids, and the sports governing bodies, according to these athletes, to look the other way when evidence of steroid use had surfaced.

And though the involvement of NFL coaches and doctors in prescribing or encouraging steroid use is not at all established and may be much less direct, if at all, it has still taken the League a long time to respond. However, the commissioner of 29 years, took what I believe to be one of the most significant steps that he has taken in all his brilliant career. Evidence of widespread steroid use among NFL players was alleged earlier, but now we are receiving some action, which I highly compliment.

And to a promising high school athlete who has worked hard and dreamed of receiving a football scholarship to a major college like the University of Delaware, the risk of steroids health problems 10 or 20 years from the time they began to use them does not seem to outweigh the immediate benefits of steroid use. Steroids may give a successful college football player just the edge he needs to win a multimillion-dollar NFL contract.

Despite the troubling extent and consequences of steroid use among athletes and young people, I am encouraged by the willingness of some athletes, coaches, sport officials, and the commissioner to come forward and confront this problem.

I think this willingness stems from the recognition that big-time professional and collegiate athletes and coaches are among the most important role models in our country, not a role you seek but one that you inherit when you take on the responsibilities you do. And with the special attention and stature that they enjoy in our society come the special responsibility to set examples.

I believe that is why we have such distinguished witnesses with us this morning, witnesses who rank among some of the most successful and prominent players and coaches ever in college or professional football. I am particularly pleased that Commissioner Rozelle is back with us today.

Some have said that the NFL has not done enough about this issue, but I think it is commendable that one of the most significant and, as it turns out, one of the last major public appearances

of this extraordinary man with an extraordinary career has been to come and speak out on this problem. Twenty-nine years as commissioner, and now culminating that career with a significant contribution.

Commissioner, I know that the sports history books will look very kindly upon you, and if you are able in your final days of your tenure to commit the National Football League to ridding pro football of drug abuse, including steroids, you will be making a contribution not only to pro football but to all of your fellow countrymen.

The NFL's words and actions together with those of successful college and pro athletes and coaches around the country can demonstrate that taking steroids is dangerous, wrong, and it will cost them not only their health but how they are treated and that it will not be tolerated—that would send a very powerful message about drug abuse to young people all across this country.

That would be a tremendous accomplishment because when all is said and done, only when we change attitudes will we see a significant decrease in the abuse of all dangerous drugs, including steroids. And attitudes will not change as long as those who are looked upon by their peers and fans condone and benefit from the use of a harmful substance that gains a chemical advantage for them that has nothing to do with the God-given talents and sweat-honed ability that high school, college, and professional athletes achieve. For whether it is in high school or in college or in the pros, the fact of the matter is tens of millions of we Americans still look to those people who are the stars on the athletic field as the role models in our schools, in our colleges, and in our lives.

If they are able to benefit from this use without any penalty, then it seems to me the message is overwhelming to the rest of America that drug abuse in any form is not that big a deal, it is still basically condoned by society.

Without objection, we will include the prepared opening statement of Senator Kohl in the record at this point.

[The prepared statement of Senator Kohl follows:]

PREPARED STATEMENT OF SENATOR HERBERT KOHL

INTRODUCTORY STATEMENT ON STEROIDS

MR. CHAIRMAN, I WANT TO COMMEND YOU FOR HOLDING TODAY'S HEARING ON THE PROBLEM OF STEROIDS IN SPORTS. I HAVE A DEEP INTEREST IN THIS SUBJECT FOR TWO REASONS. FIRST, I AM COMMITTED TO FIGHTING ILLICIT DRUGS IN ALL CORNERS OF LIFE. AND MAKE NO MISTAKE--ILLEGAL STEROIDS ARE DRUGS. SECOND, I OWN A PROFESSIONAL SPORTS TEAM, THE MILWAUKEE BUCKS. ALTHOUGH STEROIDS HAVE NOT INFECTED BASKETBALL TO THE EXTENT OF SOME OTHER SPORTS, I AM STILL WORRIED ABOUT THEIR EFFECT ON THE GAME. I INTEND TO LISTEN TO OUR WITNESSES VERY CAREFULLY TO SEE WHAT WE CAN LEARN FROM FOOTBALL.

ATHLETES WHO USE STEROIDS ARE HURTING THEMSELVES, CHEATING US ALL, AND BETRAYING OUR YOUTH. THEY ARE HURTING THEMSELVES BECAUSE STEROIDS CAN CAUSE SERIOUS HEALTH PROBLEMS. A STEROID USER TRADES HIS OVERALL HEALTH AND WELL-BEING FOR A SHOT AT FAME AND FORTUNE. LIVER CANCER, STERILITY, HEART DAMAGE--THESE ARE ONLY SOME OF THE COSTS ASSOCIATED WITH THE DRUG.

STEROID USERS ARE ALSO CHEATING THE REST OF US BY MAKING A MOCKERY OF FAIRNESS AND SPORTSMANSHIP. NATURE HAS PROVIDED EACH OF US WITH UNIQUE ABILITIES, WHICH WE CAN DEVELOP WITH PRACTICE AND HARD WORK. AN ATHLETE'S SUCCESS SHOULD NOT

DEPEND ON HIS OR HER WILLINGNESS TO INGEST A PILL OR INJECT A LIQUID. THE SPORTS COMMUNITY MUST NOT TOLERATE SUCH A CRUEL CHANGE IN THE RULES BY WHICH WE PLAY.

BUT WORST OF ALL, STEROIDS USERS SET AN INTOLERABLE EXAMPLE FOR OUR NATION'S YOUTH. EVERY TIME A SPORTS HERO BETRAYS US THROUGH DRUG USE, HE OR SHE ALSO HARMS OUR CHILDREN. ILLEGAL STEROIDS HAVE SPREAD INTO THE HIGH SCHOOLS TO AN ALARMING DEGREE. BETWEEN A QUARTER MILLION AND A HALF MILLION STUDENTS ARE USING THEM. OF THESE, ABOUT 25 PERCENT USE STEROIDS TO IMPROVE THEIR LOOKS. THE SAD TRUTH IS THAT STEROIDS CAN STUNT GROWTH AMONG UNDEVELOPED TEENS, AND THEY TURN PLEASANT BOYS INTO MOODY MONSTERS.

MR. CHAIRMAN, I AM GRATEFUL FOR YOUR EFFORTS TO MAKE THE DISTRIBUTION OF STEROIDS A FELONY CRIME. LET THE PUSHERS BEWARE: IF THEY SELL STEROIDS TO A MINOR, THEY CAN NOW BE IMPRISONED FOR SIX YEARS. BUT WE MUST DO MORE THAN GET TOUGH ON THOSE PEDDLING THE PILLS. THE SPORTS FEDERATIONS MUST COME DOWN HARD ON COACHES AND TRAINERS WHO WINK AT STEROIDS. THE HONEST ATHLETES MUST COME FORWARD TO REPORT DRUG USE. PHYSICIANS AND TEACHERS SHOULD PUBLICIZE THE SIDE EFFECTS OF STEROIDS. FINALLY, FANS NEED TO COMMUNICATE A MESSAGE TO

ATHLETES: WE RESPECT HONEST EFFORTS, NOT ARTIFICIAL ACHIEVEMENTS.

THANK YOU, MR. CHAIRMAN.

The CHAIRMAN. Do you have an opening statement, Senator?

Senator SPECTER. Yes, Mr. Chairman.

The CHAIRMAN. I yield to my colleague from Pennsylvania, who has an opening statement.

OPENING STATEMENT OF SENATOR ARLEN SPECTER

Senator SPECTER. Thank you, Mr. Chairman.

At the outset, I commend you, Senator Biden, for convening these hearings. I believe they are important because they deal with an important substance, they deal with professional athletics, college athletics. The impact of athletics in the life of America is overwhelming, as you have already noted, as the role model aspect.

Steroids are a dangerous drug. We have at the present time Federal law. The Federal Food and Drug Act prohibits the distribution or possession with intent to distribute steroids, providing for a three-year sentence.

It is interesting that the following section of the Federal law makes it a penalty twice as high, 6 years, for distribution of steroids to those who are under 18 years of age. Steroids pose an extreme danger to the user. They pose a danger to the people whom he or she comes in contact. They pose a long-term health danger in terms of possible heart ailments.

I join you, Senator Biden, in commending Commissioner Rozelle for the stand which has already been taken, and I believe that a hearing like this has a very useful form not only as a basis for the legislation which Senator Biden has proposed to make it illegal to use the mails or telephones for the distribution of steroids but to focus public attention on this problem.

There is nothing like public information and public education. A Senate hearing can do a great deal more than a host of prosecutions, because when the dangers become apparent to the young people of America, especially high school students or even younger students, who are very interested to win. We have an attitude of winning which I think is wonderful, the competition in sports, high school, college, professional, is a big part of American life and it is commendable, but it can be excessive. It is excessive when the means are improper, and the use of steroids is improper. It is improper in terms of an unfair advantage to the athlete on a momentary basis and it is very harmful in what injury he may do to himself or others with whom he or she comes into contact.

So, I think these hearings are important. They are doubly important, Mr. Chairman, because of the prevalence of Pennsylvanians on the list. We have Coach Paterno, a man who all know. We have Coach Noll, who many know as well, and we have Steve Courson, who is a Pennsylvanian and former NFL player with the Pittsburgh Steelers.

So, I am delighted to see these hearings and glad to participate with you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

The reason why we invited all those Pennsylvanians is we wanted to make your attendance worthwhile. [Laughter.]

And I hope we succeeded.

I might add that not only is it a danger to those who run into people—I assume that was not a punt—run into people who use steroids, I am not anxious to run into a 300-pound person who is using steroids, and that is part of the thing I would like to discuss today.

Two comments I want to make and then I am going to go directly to questions and start with you, Commissioner. But I want to point out to this panel or any other panel here that this is not an investigation, we are not looking for coaches or players to name names and pick out people who are using or not using. The fact is I want to find out what we are going to do from here, and I am not particularly looking at what we did not do the last 20 years or 10 years or 5 years.

I also do not expect any of you to comment on the degree of medical danger that is posed. We are going to have another medical panel back again to discuss that, but you are welcome to speak on that, although I do not expect it.

And I have a bill that would make steroids a controlled substance. You are welcome to speak to that. But again, I do not expect it. I really want you, if you are willing, to be as frank as you can with me to try to help this committee determine what you are intending to do about the problem from here.

There are others who have opening statements on the committee, and they will be inserted in the record. And Senator Thurmond will be here about 10:30.

But before I begin my questions, why don't I yield to any of you and start with you, Coach, if any of you have an opening statement. Just work your way across to Coach Noll.

STATEMENT OF PETE ROZELLE, NFL COMMISSIONER, ACCOMPANIED BY CHUCK NOLL, HEAD COACH, PITTSBURGH STEELERS; MARTY SCHOTTENHEIMER, HEAD COACH, KANSAS CITY CHIEFS; AND JAY MOYER, NFL EXECUTIVE VICE PRESIDENT AND LEGAL COUNSEL

STATEMENT OF MARTY SCHOTTENHEIMER, HEAD COACH, KANSAS CITY CHIEFS

Mr. Schottenheimer. The events of the past year have certainly heightened the awareness of everyone. Those of us in professional athletics, amateur athletics, the American public, the international community with regard to the problem of anabolic steroids. These substances, I think it has been established, can in fact create competitive advantages for those individuals who, in conjunction with high-intensity type training, get involved in that situation.

I think that, as you made reference, the focus of sports with regard to drugs has dealt primarily over the past decade in the area of the street drugs, if you will, but obviously it has become very apparent that the anabolic steroids and the potential harmful side effects that they might produce has made all of us very cognizant of the fact that it is an issue that needs to be addressed.

I think essentially from a competitive standpoint the artificially created athlete, if you will, poses dangers not only to himself but to opponents which in the course of time through the efforts of this

committee and each of the independent sports organizations will in fact, I am sure, be addressed.

I think essentially the process of education is the ultimate solution to the problem. I think when you address the matter of these side effects, the potentially harmful effect that they would have, you are going to reach a number of people who might be considering using them or in fact are presently using them.

I think also the program initiated by the National Football League, under Commissioner Rozelle, with regard to the penalties set forth for steroid use is another step in the direction of trying to resolve these particular issues.

I think we would be remiss if we didn't recognize a need to establish a viable alternative to the competitive athlete who is seeking an opportunity to be able to perform at his very best. And I would suggest that there is in fact a viable alternative, a combination of high-intensity supervised training, the utilization of cardiovascular and aerobic conditioning. The feeling that these things, in conjunction with proper diet and nutrients, supplemental protein additives, can in fact produce, be it over a longer period of time, the same benefits that steroids in fact would produce.

Sport provides the athlete with an opportunity to exhibit his skills, skills that have been developed through hard work and discipline and dedication. The public can and should expect that the results on the field accurately represent these skills.

The idea that a competitor whose performance is chemically supported or enhanced could prove to be obviously contradictory to the very spirit of sports, and I would like to suggest that there is certainly no place in sports for this artificial athlete whose opportunity to succeed is a byproduct of a substance that is created chemically in a laboratory.

Thank you.

The CHAIRMAN. Thank you, coach. I should, as I introduced you, indicate who the witnesses are. Coach Schottenheimer is entering his first season as head coach of the Kansas City Chiefs after coaching the Cleveland Browns from 1984 to 1988.

Coach, you are the winningest coach in the American Football Conference over the past 3 years. We welcome you and your statement.

Our next speaker is Commissioner Rozelle, who, when I called him said, "Joe, I will be willing to come. Are you going to treat me better than you did last time?" [Laughter.]

And I didn't realize that I treated him so badly last time. The issue then was—it was all Arlen Specter's fault. [Laughter.]

The issue then was whether or not we were going to lose the Philadelphia Eagles, and the issues of towns and their roles and being able to keep professional teams. And he and I did get into a heated conversation.

Not only am I not going to get in a fight with you, I am sorry if I offended you last time. That is not the case today.

You are entering the end of a great career in football. At 33 years of age you took on the commissioner's job, and over the past 29 years you have built the NFL into a major institution in this country. And I might add, because of your work, and I mean this sincerely, I think you are part of the reason why the value of those

franchises have increased so drastically as well. You are regarded by some as the most successful sports administrator in the history of this country, and you have been introduced into the Pro Football Hall of Fame in 1985. And we are delighted to have you back here. And if you would like to proceed with an opening statement, we would welcome it.

STATEMENT OF PETE ROZELLE, NFL COMMISSIONER

Mr. ROZELLE. Thank you very much, Mr. Chairman, members of the committee. I appreciate your invitation to testify today.

With me, in addition to Marty Schottenheimer, the head coach of the Kansas City Chiefs, is Jay Moyer, the National Football League's executive vice president and legal counsel; and Chuck Noll, of course, the head coach of the Pittsburgh Steelers.

Your focus this morning is on a subject about which the National Football League feels strongly since it impacts on both the health of our players and the integrity of our games.

Seven weeks ago I announced new procedures in the NFL's effort to combat anabolic steroids. NFL players now face the possibility of missing a large portion or all of the 1989 season if they use these drugs. As is true under our policy on cocaine and other so-called street drugs, we will not hesitate to remove those who use steroids from participation in professional football.

While our current procedures are more comprehensive than in prior years, steroids are not a problem that we have suddenly noticed. Concerned people in the NFL, like those in other levels of athletics and the medical community, have been aware of this issue and have struggled with it for some time.

Continuing research and advances in laboratory testing have now enabled us to intensify our effort to eliminate steroids from professional football and thereby protect both the game and its players.

The fundamental responsibility of anyone in the position I have occupied for nearly 30 years is to protect as best he can the integrity of the game he oversees and the public confidence in it. In my view, steroids use both threatens that integrity and confidence and presents other significant problems as well.

First, steroid usage creates health risks. Athletes who take steroids for short-term physical gains greatly increase their potential for serious medical complications later in life and possibly in the short run as well.

While the AMA apparently does not agree, our medical advisors also tell me there is now mounting evidence that anabolic steroids may have a devastating trait in common with the street drugs: They may lead to addiction.

Second, steroid use can impact directly on the integrity of the game. After years of widespread denial or equivocation, particularly among doctors, there is now a consensus that these substances can provide a competitive advantage, particularly where a high premium is placed on size and strength. No sport should tolerate such an artificially gained competitive edge.

The third risk of anabolic steroid use by adult athletes, as dangerous as the other two, is its potential on the youth of America. I

fully concur with your earlier remarks. Whether the NFL players like it or not, they are role models.

I worry about the young athlete still in his formative years who emulates his favorite college or pro football star by taking a drug he believes to be a harmless source of size and strength. Equally worrisome is the youngster who recognizes the risks but ignores them and looks beyond to the rewards of a large physique and possibly a professional contract.

Since the early 1970's, the NFL has monitored all prescription drugs dispensed by team medical staffs. This system guards against abuse of controlled drugs, as defined by the Federal Controlled Substance Act, and other medications that might be used to enhance athletic performance.

Our primary concern in the 1970's was directed at amphetamines and similar substances as well as the street drugs because relatively little was really known about anabolic steroids at that time.

Looking back with the benefit of hindsight, it was only a matter of time before the drugs familiar to the weight lifters and body builders found their way into football.

We tried to keep pace with this discouraging trend. Our earlier attempts were in the area of education. For example, in 1983 I sent a personal letter to all players in the league reminding them of the NFL's policy against abuse of legal prescription drugs and pointing out that anabolic steroids fell squarely within the category.

Special emphasis was placed on the adverse health effects of steroids. Two years ago, we began urine testing for steroids, even though the time and expense involved was far greater than with other drugs. And we were dealing with very large playing squads rather than with a few medal-winners from a track meet. For those who tested positive, we followed up with more educational materials, including communications from our outside drug advisor and appropriate counseling.

In 1987, the NFL produced a videotape on the harmful effects of steroids, featuring a discussion among our drug advisor, the medical officer for the U.S. Olympic Committee, an expert from the American College of Sports Medicine, and two team physicians from the NFL.

This tape was made available for showing to our own players, and 450 copies of it have been distributed throughout the country by the National State High School Coaches Association. We received very positive responses to these materials from educators throughout the country.

Unfortunately, however, education can only go so far. We believe there that our educational efforts have been a deterrent to many players who otherwise might now be using steroids.

But with any drug, there is always a hard core of people who will not stop using. For this hard core, testing and the promise of disciplinary action appear to be the only meaningful answer.

Candidly, I cannot guarantee that our testing has detected or will detect every steroid user in the NFL. I was advised last fall that pre-season testing in 1987 and 1988 indicated a solidly documentable steroid use by 6 to 7 percent of NFL players. I have read of higher estimates in the NFL and in other sports fields. But the evidence behind them is largely anecdotal or speculative.

As a result of an arbitrator's decision, we have been limited to testing once a year in training camp and thereafter only for reasonable cause. Also, common wisdom says that the users underground is often one step ahead of the tester. Time will tell if that is true. Whatever the precise usage figure may be, and despite the real-world limitations with which we must operate, I believe we must do whatever we can to address this problem.

Accordingly, all of our players will be tested for steroids at preseason training camp this summer. They will also be tested for masking agents that are used to try to avoid detection of steroid use.

Attached to my statement is a copy of the letter I have sent to all NFL players and to hundreds of top college football prospects who are eligible for this year's college draft, notifying them of the league's new steroid policy.

To summarize that policy, if a player tests positive in training camp, he will be removed from the roster and prohibited from participating with his team for a minimum of 30 days. This means he will miss at least four games. If it takes longer than that to clear his system of steroids or masking agents, he will be out as long as it takes.

After his return, the player will be subject to continuous reasonable-cause testing.

Incidentally, those players who tested positive for steroids in either of the past two seasons will be candidates for ongoing reasonable-cause testing even if they are clean in their 1989 training camp tests. If he again tests positive this year, he will be suspended for the rest of the season, including the playoffs and the Super Bowl.

This is quicker and heavier punishment than our policy calls for on street drugs. The reason for this is what I referred to a few moments ago, the now conceded competitive edge that steroid users can obtain on the playing field. Needless to say, street drugs like cocaine and marijuana are a major problem in society at large. In our context, their use certainly imperils public confidence in pro football.

But steroids pose a special threat to the basic concepts of honesty and sportsmanship on which public confidence in NFL football demands.

Some would say that even these penalties are insufficiently severe. They would advocate a so-called zero-tolerance approach to steroids and to street drugs as well. In a perfect and much simpler world, I would agree. But we are somewhat constrained by general legal uncertainties in this fast-developing and often controversial area.

We are also constrained by an arbitrator's decision in the wake of my initial effort to strengthen the NFL's anti-drug policies 3 years ago. The arbitrator ruled out periodic, unscheduled testing of all players, which would have been the most effective possible deterrent to steroid or other drug use.

In addition, we do not think it wise or right to ignore entirely the medical side of drug use and abuse. Our policy, consequently, attempts to balance educational, medical, and disciplinary factors in what we feel to be a sound and defensible way.

Beyond that, I would obviously welcome a joint labor-management agreement on even stronger and more effective deterrents and responses to drug use for the ultimate benefit of the athletes themselves, the game of which they are an integral part, and the young people who look up to them.

To my knowledge, the NFL's recent measures are the first systematic and pervasive approach to combating steroid use among athletes in major team sports. Our measures are designed to promote common sense, fair play, and good health. If they do no more than generate an increased awareness among athletes at all levels of the potential risks in using steroids, our program will have been a modest success.

Coupled with further educational measures and with the help of concerned coaches, trainers, and team doctors who are forcefully intolerant of steroid use, we hope our new measures will be a much larger success and a significant step toward eradicating these drugs from our sport.

The CHAIRMAN. Thank you, Commissioner.

[The prepared statement of Mr. Rozelle follows:]

STATEMENT OF PETE ROZELLE

Commissioner, National Football League

BEFORE THE COMMITTEE ON THE JUDICIARY
OF THE UNITED STATES SENATE

May 9, 1989

STATEMENT OF PETE ROZELLE

Mr. Chairman and Members of the Committee, I appreciate your invitation to testify today. With me is Jay Moyer, the National Football League's Executive Vice President and League Counsel.

Your focus this morning is on a subject about which the National Football League feels strongly, since it impacts on both the health of our players and the integrity of our games.

Seven weeks ago I announced new procedures in the NFL's effort to combat anabolic steroids. NFL players now face the possibility of missing a large portion or all of the 1989 season if they use these drugs. As is true under our policy on cocaine and other so-called street drugs, we will not hesitate to remove those who use steroids from participation in professional football.

While our current procedures are more comprehensive than in prior years, steroids are not a problem that we have suddenly noticed. Concerned people in the NFL -- like those in other levels of athletics and in the medical community -- have been aware of this issue and have struggled with it for some time. Continuing research and advances in laboratory testing have now enabled us to intensify our effort to eliminate steroids from professional football and thereby protect both the game and its players.

The fundamental responsibility of anyone in the position I have occupied for nearly thirty years is to protect, as best he can, the integrity of the game he oversees and the public's confidence in it. In my view, steroid use both threatens that integrity and confidence and presents other significant problems as well.

First, steroid usage creates health risks. Athletes who take steroids for short-term physical gains greatly increase their potential for serious medical complications later in life, and possibly in the short run as well. While the AMA apparently does not agree, our medical advisors also tell me there is now mounting evidence that anabolic steroids may have a devastating trait in common with the street drugs: they may lead to addiction.

Second, steroid use can impact directly on the integrity of the game. After years of widespread denial or equivocation, particularly among doctors, there is now a consensus that these substances can provide a competitive advantage, particularly where a high premium is placed on size and strength. No sport should tolerate such an artificially-gained competitive edge.

The third risk of anabolic steroid use by adult athletes, as dangerous as the other two, is its potential effect on the youth of America. Whether NFL players like it or not, they are role models. I worry about the young

athlete, still in his formative years, who emulates his favorite college or pro football star by taking a drug he believes to be a harmless source of size and strength. Equally worrisome is the youngster who recognizes the risks, but ignores them and looks beyond to the rewards of a larger physique and possibly a professional contract.

Since the early 1970's the NFL has monitored all prescription drugs dispensed by team medical staffs. This system guards against abuse of controlled drugs, as defined by the Federal Controlled Substance Act, and other medications that might be used to enhance athletic performance. Our primary concern in the 1970's was directed at amphetamines and similar substances, as well as the street drugs, because relatively little was really known about anabolic steroids. Looking back with the benefit of hindsight, it was only a matter of time before the drugs familiar to weightlifters and body builders found their way into football.

We tried to keep pace with this discouraging trend. Our earlier attempts were in the area of education. For example, in 1983 I sent a personal letter to all players in the League reminding them of the NFL's policy against abuse of legal prescription drugs and pointing out that anabolic steroids fell squarely within that category. Special emphasis was placed on the adverse health effects of steroids.

Two years ago we began urine testing for steroids, even though the time and expense involved was far greater than with other drugs, and we were

dealing with very large playing squads rather than with a few medal winners from a track meet. For those who tested positive, we followed up with more educational materials, including communications from our outside drug advisor and appropriate counseling.

In 1987 the NFL produced a video tape on the harmful effects of steroids featuring a discussion among our drug advisor, the medical officer for the United States Olympic Committee, an expert from the American College of Sports Medicine, and two team physicians from the NFL. This tape was made available for showing to our own players, and 450 copies of it have been distributed throughout the country by the National State High School Coaches Association. We have received very positive responses to these materials from educators throughout the country.

Unfortunately, however, education can only go so far. We believe that our educational efforts have been a deterrent to many players who otherwise might now be using steroids. But with any drug, there is always a hard core of people who will not stop using. For this hard core, testing and the promise of disciplinary action appear to be the only meaningful answer.

Candidly, I cannot guarantee that our testing has detected, or will detect, every steroid user in the NFL. I was advised last fall that pre-season testing in 1987 and 1988 indicated solidly documentable steroid use by six to seven percent of NFL players. (I have read of higher

estimates, in the NFL and in other sports fields, but the "evidence" behind them is largely anecdotal or speculative.) As a result of an arbitrator's decision, we have been limited to testing once a year in training camp, and thereafter only for reasonable cause. Also, common wisdom says that the users' underground is often one step ahead of the testers. Time will tell if that is true. Whatever the precise usage figure may be, and despite the real-world limitations within which we must operate, I believe we must do whatever we can to address this problem.

Accordingly, all of our players will be tested for steroids at preseason training camp this summer. They will also be tested for "masking agents" that are used to try to avoid detection of steroid use. Attached to my statement is a copy of the letter I have sent to all NFL players, and to hundreds of top college football prospects who were eligible for this year's college draft, notifying them of the League's new steroid policy.

To summarize that policy: if a player tests positive in training camp, he will be removed from the roster and prohibited from participating with his team for a minimum of 30 days. This means he will miss at least four games. If it takes longer than that to clear his system of steroids or masking agents, he will be out as long as it takes. After his return, the player will be subject to continuous reasonable-cause testing.* If he again tests positive this year, he will be suspended for the rest of the season, including the playoffs and Super Bowl.

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*Those players who tested positive for steroids in either of the past two seasons will be candidates for ongoing reasonable-cause testing even if they are "clean" in their 1989 training camp tests.

This is quicker and heavier punishment than our policy calls for on street drugs. The reason for this is what I referred to a few moments ago: the now-conceded competitive edge that steroid users can obtain on the playing field. Needless to say, street drugs like cocaine and marijuana are a major problem in society at large; in our context, their use certainly imperils public confidence in pro football. But steroids pose a special threat to the basic concepts of honesty and sportsmanship on which public confidence in NFL football depends.

Some would say that even these penalties are insufficiently severe. They would advocate a so-called "zero tolerance" approach to steroids, and to street drugs as well.

In a perfect and much simpler world, I would agree. But we are somewhat constrained by general legal uncertainties in this fast-developing and often controversial area. We are also constrained by an arbitrator's decision in the wake of my initial effort to strengthen the NFL's anti-drug policies three years ago; the arbitrator ruled out periodic unscheduled testing of all players, which would have been the most effective possible deterrent to steroid or other drug use. In addition, we do not think it wise or right to ignore entirely the medical side of drug use and abuse. Our policy consequently attempts to balance educational, medical and disciplinary factors in what we believe to be a sound and defensible way. Beyond that, I would obviously welcome a joint labor-management agreement on even stronger and more effective deterrents

and responses to drug use -- for the ultimate benefit of the athletes themselves, the game of which they are an integral part, and the young people who look up to them.

To my knowledge, the NFL's recent measures are the first systematic and pervasive approach to combating steroid use among athletes in major team sports. Our measures are designed to promote common sense, fair play, and good health. If they do no more than generate an increased awareness among athletes at all levels of the potential risks in using steroids, our program will have been a modest success. Coupled with further educational measures, and with the help of concerned coaches, trainers, and team doctors who are forcefully intolerant of steroid use, we hope our new measures will be a much larger success, and a significant step toward eradicating these drugs from our sport.

Our next witness is Jay Moyer, who is the executive vice president and legal counsel for the NFL.

STATEMENT OF JAY MOYER, NFL EXECUTIVE VICE PRESIDENT AND LEGAL COUNSEL

Mr. MOYER. Senator, thank you. I really have nothing to add to the Commissioner's statement. I am here basically to help with questions if that becomes warranted.

The CHAIRMAN. Thank you very much.

Mr. MOYER. I will defer to Coach Noll.

The CHAIRMAN. Our next distinguished witness is Chuck Noll, who is entering his 21st season as head coach of the Pittsburgh Steelers.

Coach, you are the second winningest coach, I need not tell you, in NFL history and the only coach in the NFL to have won four Super Bowl Championships.

I might add, you may not remember it but you did a great personal favor for me. In 1972, right after I was elected, my family was in an accident, resulting in my two sons being hospitalized after the death of their mother and their sister. And you contacted me.

You got your entire team, unsolicited from me, the players to sign a couple of footballs and send them down to my boys. And at a time when we were looking for anything to change the focus, it was a great help. And for that I will be ever indebted to you and your 1972 Steelers football team.

At any rate, I thank you personally for that and thank you for what you have done for the sport. Now, if you have an opening statement, please proceed.

STATEMENT OF CHUCK NOLL, HEAD COACH, PITTSBURGH STEELERS

Mr. NOLL. Thank you, Senator.

You talked rather glowingly about the dream, and mostly the up side. I am going to kind of talk about the down side of that dream that you were talking about, and that to me involves steroids.

Steroid use has grown in direct proportion to the increased moneys to be made in football. I think it started with the infusion of weight training in football, part of the never-ending search for the edge. I think it came into professional football from Olympic weight lifters and coaches and has grown from small dosages to mega-doses in pursuit of mega-bucks. I think that is probably one of the big things.

How many people are involved in this? I think there are a few who may make your team, but many more who don't, and this is what I am referring to as the down side. Many more who don't, who falsely see steroids as a chance to make up for a lack of talent.

Until we were able to test for steroids 2 years ago, it was at best a guess except for the few who had gone public. I am talking about how many. But since testing, the Pittsburgh Steelers have had three positive tests, none of which made the team.

The policy of the Pittsburgh Steelers, in answer to your inquiry, and my stance for the 21 years I have been with them, has been

against the use of steroids or any other chemical substance, on the grounds that they are a crutch and work contrary to our purpose.

Obviously, our purpose as a football team is to be the best team in professional football, and to achieve that goal we must have solid people, good football players who are mentally, physically, and emotionally solid. And I would like to just address those things.

When I talk about mentally solid, I am talking not only about the ability to learn the X's and O's, the physical skills and techniques to succeed, but the ability to set proper goals and priorities and to achieve them. The ability to work with teammates to achieve these goals.

The problem is that the "I can take a pill" mentality distorts priorities and produces a "rather be in the weight room, rather look at myself in the mirror," than a person who wants to be successful on the football field.

Physically solid is somebody we are looking for, and that someone without physical impairments and one that has the playing strength and the techniques to stay healthy through a long professional football season. The professional, or any football field, is kind of a dangerous place to be and you have to have that. Steroids, although they provide weight room strength, do not provide playing strength. When I am talking about strength on the field, the ability to survive contact. They produce strong muscles, there's no doubt about that; weak tendons, histories of muscle pulls, stress fractures, and problems maintaining fluid balance—all of which are contrary to our goal of remaining healthy and dependable.

Probably the biggest thing is emotionally solid. We are looking for people who will rely on their God-given gifts and who are confident in their own personal resources and rely on these to be successful in the dangerous atmosphere.

It is counterproductive to be dependent on the pill or to think you can get something out of a bottle. It is not emotionally solid and obviously is the crutch I was talking about.

When we sign a player, we sign a whole person. We get the whole package, his physical makeup as well as his mental and emotional state, his fears, his hangups, his beliefs, and his addictions.

I think the present NFL policy would be adequate if we had random testing. Education is not enough. The emotional promise of big moneys and fame push aside any logic that might be used on a youth unaware of their mortality.

Steroid use by a professional football player is not as great a competitive edge as it is in weight training or weight lifting or maybe track and field. But given the medical side effects, steroid use by a football player is ridiculous, by any athlete is dangerous.

Peer pressure, the carrot mentality, the unfair competitive edge, and the severe long-range physical damage to the individual cry for regulation.

The CHAIRMAN. Thank you very much, Coach.

We will allow one more opening statement, from our ranking member who was necessarily absent the first half hour. Then I will go directly to questions for Commissioner Rozelle.

Senator Thurmond.

OPENING STATEMENT OF SENATOR STROM THURMOND

Senator THURMOND. Thank you very much.

I just want to take this opportunity to welcome these distinguished witnesses here today. I have known Pete Rozelle for a number of years and congratulate him on his long, faithful service.

And I am very glad to see these other prominent people here today.

We will hear today testimony regarding the problem of steroid abuse in professional and college football. As a result of this hearing, we will better appreciate the gravity of the problem and learn about efforts being undertaken to end steroid abuse within the National Football League and college and university football programs.

We will hear today the testimony of prominent representatives from the NFL, successful coaches, and outstanding players. Their testimony will shed light on the steps which have been taken and what additional steps are necessary to put an end to this serious problem of steroid abuse.

Anabolic steroids are synthetic derivatives of the hormone testosterone, which occurs naturally in the human body. When used improperly, it is common for athletes to consume 20 to 40 times the amount of testosterone naturally produced in their bodies. The result is a supercharging of sorts, one that enhances the growth of muscle tissue. Although effective in the short term, improper use of steroids can have devastating, life-threatening physical effects.

Last year, as part of the Anti Drug Abuse Act of 1988, legislation was enacted which prohibits the distribution of anabolic steroids for any use in humans other than for medical treatment. This provision was in response to the growing abuse of anabolic steroids by young adults, body builders, and athletes.

Ignoring the proven adverse side effects of steroid use, such as sterility, heart disease, liver disease, and cancer, individuals have continued to use steroids in an effort to make themselves stronger, faster, and physically more attractive.

Despite the proven side effects, the abuse of steroids appears to be on the rise, especially among our young people. The U.S. Food and Drug Administration estimates that as much as 10 percent of the high school students of this Nation have used anabolic steroids. That figure is 30 percent higher than previous estimates. The problem can only be described as epidemic.

Steroid use in organized football is a vicious cycle perpetuated by players who are fearful they may not make the transition from high school football player to college football star to NFL hero. The potential prestige the game of football offers, the realization that other players are using steroids, and the inability to compete with those abusing the drug combine to lead these men to set aside their principles and better judgment.

I was pleased to learn that the NFL recently announced that it would begin testing its players for steroid abuse. Several colleges and universities have begun to test their football players as well. Despite these efforts, however, steroids are still being abused by players. Just how extensive the problem is among the players is something I am sure the witnesses will help clarify.

With the strong demand for these steroids, there will always be those who attempt to profit from their sale. The steroid problem involves a national black market through which thousands, even millions of dollars 'worth of steroids change hands. Many illicit steroid dealers have been using the regular mails to distribute their drugs.

In addition, steroid dealers from various parts of the world, particularly Mexico, have been marketing their products in the United States through direct mail and telephone solicitation.

This must be stopped. Recently, I was pleased to join with Senator Biden in introducing legislation which builds upon the drug bill Congress passed last year, by making it illegal to use the mails to distribute steroids. Those who violate this provision would be subject to imprisonment and tough criminal fines.

The bill also makes the solicitation of illegal steroid sales a criminal offense and provides for the forfeiture of those assets used to violate the statute.

In effect, this bill will give the United States postal inspectors the necessary jurisdiction to provide needed assistance to law enforcement in the battle against illegal steroid use.

Mr. Chairman, the abuse of anabolic steroids is a serious problem facing this Nation. Every day people are using these drugs despite the extreme risk to their health. We must not stand by and watch as thousands of our citizens, especially young people, ruin their lives for the sake of bigger and stronger bodies. Without question, those who sell steroids in violation of the law are drug pushers, nothing less, who warrant tough punishment for their criminal acts.

Everyone associated with football, including management, coaches, and players, must join in the effort to rid America of steroid abuse.

For these reasons, it is important to hear this testimony today, and I look forward to hearing as much as I can and shall read the rest that I happen to miss.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Let me begin, Commissioner, with you, and I think you have already, in a sense, answered my first question. I was going to ask you how thorough you believe the testing program will be—the one that will be put in effect this year.

And you have indicated to me in your opening statement to us that you would have preferred a more comprehensive program. Is that correct?

Mr. ROZELLE. Yes.

The CHAIRMAN. And in light of that, do you have an opinion as to whether or not the figure that was attained from previous testing programs, of 6 percent, is in fact an accurate figure? Do you believe the figure if anabolic steroid abuse in pro football to be higher than that figure?

Mr. ROZELLE. I think along with others I felt that was probably a low figure. I didn't announce it. What I told the owners in a private meeting was that this is what our doctors said. With documentable evidence, they felt, clear evidence, it was at 6 or 7 percent level. I thought it may be, it may be higher.

But the main thing these 2 years of testing we have already done is established reasonable cause so that even if those players that tested positive in 1987 or 1988 come into training camp and they test negative, we will still test them throughout the year in the off-season because we have reasonable cause, for them using steroids.

The CHAIRMAN. Bobby Beathard, in a U.S.A. Today article in 1987 said, and I quote, "Across the board, we would have a decrease in size among linemen if we eliminated the use of steroids."

Would you agree with that? Would that happen, in your view?

Mr. ROZELLE. I really don't think so. I agree with what Coach Noll said. I don't feel it that much of a benefit, and I don't think the size would be that reduced. In other words, you can achieve the same thing through more wholesome means: exercise and vitamins and so forth.

The CHAIRMAN. Shouldn't there be some sanction imposed by the NFL against college players who test positive for steroids? For example, should athletes who test positive for steroids in college be subject to reasonable-cause testing when and if they get to the NFL?

Mr. ROZELLE. I think legally that might present some problems for us until they are actually signed for a contract and in the NFL. But I would be happy to study that, and anything we can do to enhance reasonable-cause testing legally I would like to see done.

The CHAIRMAN. Going a step further, what about limiting the eligibility of NFL players who are drafted, who test positive while in college? For example a person in the draft who tests positive, before medical tests are conducted during, just before or just after the draft process. Is that correct?

Mr. ROZELLE. We are really limited to testing in training camp. Now, the scouting combines get players to agree, I take it, when they have workouts. But these players have not been signed to NFL contracts. After they are signed, we can only do it one time, at training camp.

The CHAIRMAN. Well, how about the circumstance where a college player who is drafted has tested positive while in college? Have you considered the prospects and the legal implications to making it tough for a team that drafts that person, thereby reducing the incentive for that college student to use steroids because he is less likely to be drafted, for example, suspending that person who is drafted for the first 30 or 60 days of the first season in which they play?

Mr. ROZELLE. I think we probably would have trouble with that legally, Senator. But I would welcome it if we could do it. We will explore it.

The CHAIRMAN. Let me ask both NFL coaches this question:

Given your schedules, why did you agree to testify here today, knowing that you could be put on the spot? And I am not sure how your fellow coaches respond to your being here. Could you tell me just simply why you came?

Mr. SCHOTTENHEIMER. Very simply, it is an issue that needs to be addressed. It is a problem that is not only influencing the competitive aspects of our game, but the integrity of our game. And the opportunity, frankly, to express a point of view was something that I felt was important that I take advantage of.

The CHAIRMAN. Coach Noll?

Mr. NOLL. I feel very strongly that steroids are something that have no part in athletics and for the reasons that I cited in my opening statement. That is the reason.

The CHAIRMAN. Coach Noll, let me ask you, or ask you both actually, about the policy that the NFL now has in place which states that one time you're in trouble, twice you're in deep trouble. It is clear from this policy that the NFL has agreed to sanction players that abuse or use anabolic steroids. What should be done if it could be proven that a coach knew that the player was using anabolic steroids? Should there be any sanction against the coaches, coaching staff, trainers?

Mr. NOLL. Well, I think in my statement I made mention of the fact that anything was purely speculation. In fact, one of the real problems of the testing that we had that came back, I was completely surprised by the people who tested positive because usually you think of the steroid user as one who holds fluid, who gains a lot of weight, has the large neck and you think that is the one that is on steroids.

And it turns out that one of the people that tested positive for us was rather thin, almost emaciated by pro football standards. And there is no real way of telling when someone is on it unless they go public, unless they are tested, and again random testing is something that is very necessary to do this, and the legal ramifications tie our hands.

The CHAIRMAN. But that is really not my question. My question is: If in fact—I know in your case you did not know—but if in fact a coach encouraged a player or condoned a player's use of anabolic steroids, should there be a sanction against that coach?

Mr. NOLL. I have nothing against that, no. I would be for that.

Mr. SCHOTTENHEIMER. I share Chuck's feeling in that regard and would like to echo the statements that he made earlier, as did the commissioner, that the difficulty that we are confronted with at the present time is an inability to get a comprehensive and an accurate evaluation of these steroids abuses because of the inability to establish a random testing program.

The CHAIRMAN. We had testimony earlier from some world-class trainers and from physicians who indicated that there is no way humanly possible that someone can add more than 12 to 15 pounds of muscle, within a 12-month period. And yet, we had testimony that players come back with an additional 20 to 30 pounds of muscle.

And just for the audience, everyone knows you can measure the difference between muscle and fat. You do it all the time.

Now, should not that be a warning signal that at least requires coaches and trainers to notify the NFL commissioner that they have got a player who left camp weighing 250 and came back weighing 280 and added 30 pounds of muscle?

Mr. NOLL. I don't know that I necessarily agree with that. Given a person who has never been in a weight room before, it would be impossible to gain that kind of weight because it takes a long period of time to do that type of thing. But there have been, and I know for a fact, people will put on that kind of weight from one season to the other because they have trained in the past, and it

wasn't over a 1-year period of time but rather the backlog or the years of training allow them to do this.

Again, if that could be reasonable cause, that would be fine, too.

The CHAIRMAN. We heard testimony from a trainer in Philadelphia named Croce, who said that a person can gain 10 to 15 pounds at most, and this is researched, through hard work. As Evelyn Ashford said, although hard training through a lot of motivation and self-discipline and through proper nutrition might enable you to add 15 pounds, anything beyond that is medically not possible no matter how many years you have been training.

I guess we should find clear evidence of that fact, but it seems to me that it would be virtually impossible for anyone to add 25 pounds of muscle mass no matter what they did. They could be saying novenas and working out for the previous 27 years and any physician would agree there is no physical way for anybody to add that kind of muscle mass within a year period.

But we will have to follow up with that and make sure that is correct before we attempt to get back to you.

Let me ask both the coaches. I am an Eagles fan, but when the Eagles aren't in it I am a Pittsburgh fan because it's as close as I can get to home now that Baltimore went to Indianapolis. And they're still Baltimore, as far as I am concerned, Commissioner. [Laughter.]

But at any rate, having said that, I look back—and I am not one of these men or women who can sit down and rattle off all the statistics in pro football—but it strikes me that I cannot think, pre-1970, of one player that weighed 300 pounds or more. You all may be able to think of a couple, who were playing, starters. I can't think of any. Can you all think of any?

Mr. SCHOTTENHEIMER. I think there were several. Several come to mind. Ernie Ladd. A young man named Phil Yaw, 300-pounder that Al Davis had with the Raiders.

I do think, Senator, that there were probably more than two or three.

The CHAIRMAN. Well, in 1987, of the 65 top-ranked offensive tackles, eight weighed more than 300 pounds and 45 weighed more than 285 pounds. And I recall observing a nationally ranked football game in college football during the race for number one. I won't mention the teams that were involved, but I looked up on the screen and saw the statistics. One team had an average front offensive line, 292 pounds. And the offensive line of the other team was 286 pounds.

Now, is all that from weight training? I am not being smart when I ask that. It seems so staggering an increase in less than a decade—a staggering increase

Mr. NOLL. Some of them were winners at the dinner table. [Laughter.]

Large families.

Senator, in 1932, I think the average weight of the college all-star game was interesting because this kind of study went on, I think it was less than 200 pounds. And I think the determination, which I can't recall right now, I think we played in the last college all-star game, but the total squad, I am talking about, the average

was well over 220 pounds. And we're talking about wide receivers, running backs, as well as linemen.

They were taller. I think in 1932, I think the average was about 6 feet. I am doing this off the top of my head. It was done by a sports writer at one time. And I think at its termination it was a little over 6'2", the height.

I think that players are getting bigger, stronger, and faster. But now also, I would say, beginning in about the 1960's, that's when weight training came in, and I think there was a growth spurt there from just honest weight training, and then obviously there has been an effect from steroids.

The CHAIRMAN. It seems to me there is a logical rationale for why weight training became a serious part of athletic training. I wasn't much of a football player, as my coach will soon tell you—although I thought I was for a while—and weight training was no big deal in the early 1960's. At least if it was, I didn't know about it.

But beginning in the mid-1960's through the 1970's, weight training became a critical and essential part of athletes from high school through the pros. And I can understand that weight increase during that period. But the weight increase and the muscle mass seems staggering to me and again that is anecdotal. I cannot substantiate that. I just wondered what your views were.

Let me ask you another question, Coaches. We are going to hear testimony shortly from two former players who say that steroid use, particularly among interior linemen, is as high as 50 to 75 percent. Would you believe that figure?

Mr. SCHOTTENHEIMER. I would have difficulty, Senator, imagining that it would be that high.

The CHAIRMAN. Coach Noll?

Mr. NOLL. Going back through maybe the 1970's, our football team, the people that I know, I would have to say that we had people like Joe Green, Dwight White, Jack Ham, Jack Lambert, Andy Russell, Mel Blount, and I don't think any of those people you would say were weight room people or who were on steroids or anything like that. I can't imagine that figure as being completely accurate.

Now, the people who spend a whole lot of time in the weight training room and who are maybe addicted to weight training and steroid use, that kind of figure would bear out.

But for people who play the game and haven't done a whole lot of that—and they are a lot of people—being in the weight room does not make you a football player, does not make you strong on the football field.

The CHAIRMAN. Coach, I am sure you expected this question today. I am going to ask you the question about Ricketts. As I understand, according to the April 25 Associated Press article, the Steelers drafted Tom Ricketts as their first-round draft pick, and he had tested, I believe—correct me if I am wrong—positive in an NFL steroids test.

The article quoted you as saying, "We checked it out. Ricketts' answer was satisfactory."

But the article further stated that Ricketts denied using steroids and claimed that he had taken cortisone for an injured foot.

Did you take Ricketts' positive steroid tests into account when you drafted him number one?

Mr. NOLL. Very much so. We have done that with many players and have downgraded them as a result. With this particular case, we went back to the University of Pittsburgh to check with their people because they have been testing for steroids, and he had not tested positive in any of their tests when he had been there. We talked to the coaches. In fact, one of the coaches is on my staff right now, and he was very surprised at this revelation, really, which is what it came to.

Then we had the young man in and talked to him, and he said, just as he said in the paper, that what he had taken was for the rehabilitation and the testing. And obviously, when you deal with anybody who has been involved in any kind of drug things, we treat that very suspiciously.

But after much consideration, I think we were satisfied that that was the case and that there wouldn't be any in the future because we told him he would be tested.

The CHAIRMAN. You basically believed his story.

Mr. NOLL. That's right.

The CHAIRMAN. What would you have done had you had gone back and found out that a player had tested positive in college?

Mr. NOLL. In the past we have passed up people in the draft with that kind of background. And what we consider hard-core steroid users, we pass them up in the draft.

The CHAIRMAN. Mr. Moyer, let me ask you a legal question. Would it be illegal for the owners to get together and say without negotiating anything, "We're not going to draft anybody who tested positive for steroids in college." Would that be legal?

Mr. MOYER. I have never considered that question, Senator. And it is a good one. In fact, I would like to consider it. But my off-the-top-of-the-head reaction is that, given the structure of the National Football League, there are a lot of creative lawyers who would find a problem with that. They call it a group boycott, among other things.

The CHAIRMAN. I think it would be a nice boycott.

Mr. MOYER. So would I. I agree with you.

The CHAIRMAN. The last question I have and then I will yield to my colleague from South Carolina.

Coaches, do you think that the NFL should restrict the eligibility of new draft choices who tested positive for steroids in college, assuming that were legal? In other words, restrict their eligibility entirely, or their eligibility to play in the first part of the season.

Mr. SCHOTTENHEIMER. Well, Senator, I believe the recently established policy of the National Football League in fact does achieve that end.

The CHAIRMAN. You think testing once a year, after an announcement is going to give you that?

Mr. SCHOTTENHEIMER. Specifically with reference to those who have in fact tested positive, it is no longer an annual test but rather they are subject to the random testing.

The CHAIRMAN. What I am talking about is the policy that if there is an established pattern of abuse of anabolic steroids by a college player who is a great college player, that college player and

the team that drafts him should be penalized in some way in terms of his eligibility to play either at all or for some portion of the first season?

Mr. SCHOTTENHEIMER. Well, again I would defer to Jay in the sense that I am not sure that legally you can get yourself involved in that type of circumstance.

The CHAIRMAN. Would you object if you could?

Mr. SCHOTTENHEIMER. If legally that's permissible, certainly we would not advocate it.

Mr. MOYER. Excuse me, Marty.

Senator, one thing I should point out—it's not a total answer to your question but it's responsive to it—these timing and testing sessions that the scouting combines do early in the calendar year before the draft, we take tests there, and if a player who is then still a college player tests positive, he can become a reasonable-cause candidate for that reason alone. So, it is not that we ignoring it.

The CHAIRMAN. What is a reasonable-cause candidate?

Mr. MOYER. Meaning he can be tested in the future because he has already shown us that he has used a particular prohibited substance.

The CHAIRMAN. But you understand the question, though: It's not whether he can be tested in the future but if he tests positive at that time, does that preclude that college player from either, A, being able to be drafted for a period of time or, B, if drafted, ineligible to play for a period of time. That is the question.

Mr. MOYER. It's tempting, Senator, but I think a lot of people would have a problem with effectively penalizing a person for something he did before he came under your umbrella, so to speak. The bottom line is that we have our eyes on him because if he doe test and we know he did test positive, we keep looking and we will get him again if he doesn't get off it.

The CHAIRMAN. It seems to me the argument could be made—and I yield to my colleague—that he cheated to get to the point where he was able to be considered in the first place. And that seems to me a disqualifying feature. But I am not a commissioner and I am not an owner, unfortunately.

So, I will yield to the man who "owns" this committee, Senator Thurmond.

Senator THURMOND. Thank you, Mr. Chairman.

Mr. Rozelle, I just have a couple of questions.

In your prepared statement you mention the potential effect steroid abuse by pro football players can have on the youth of America. I want to say that I share your view that we must do all we can to stop steroid abuse by the youngsters.

Is there anything further that you would like to mention or any plans that the NFL plans to take to educate young players about the dangers of steroid use, or do you think you have covered it all previously?

Mr. ROZELLE. Well, I think we are going to continue to seek ways of reaching younger men. But the 450 cassettes that we have been distributing to the high schools around the country have met with a great deal of appreciation. I get letters every day from high schools from somewhere in the country saying how helpful they

have been. They have shown their players this little seminar on the cassette.

But if we find other ways, we will jump to implement them.

Now, one thing, the University of Minnesota did a very clever thing, and I would like to add this to the record. They developed these, which are rather humorous, if you have a sick humor, what could be the results of the taking of steroids. And we ordered sets for all 28 clubs, and these were put up in their training rooms this year.

But it does rather vividly illustrate what can come from steroid use. And I would like to add this to my statement, if I may.

[The NFL documents referred to follow:]

It wasn't easy to reach the brain of an athlete on steroids.

(actual size)

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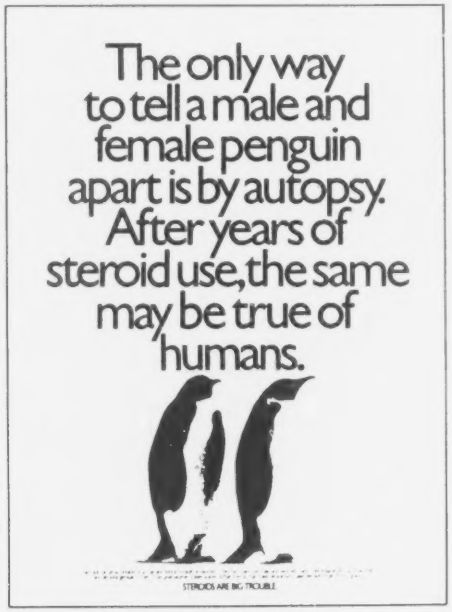
The only way to tell a male and female penguin apart is by autopsy. After years of steroid use, the same may be true of humans.
STEROIDS ARE BIG TROUBLE

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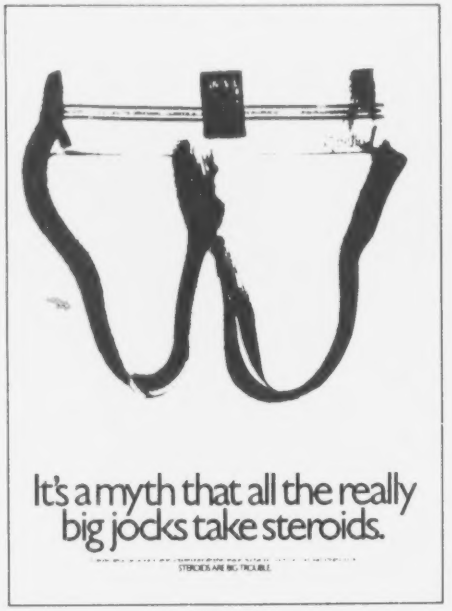
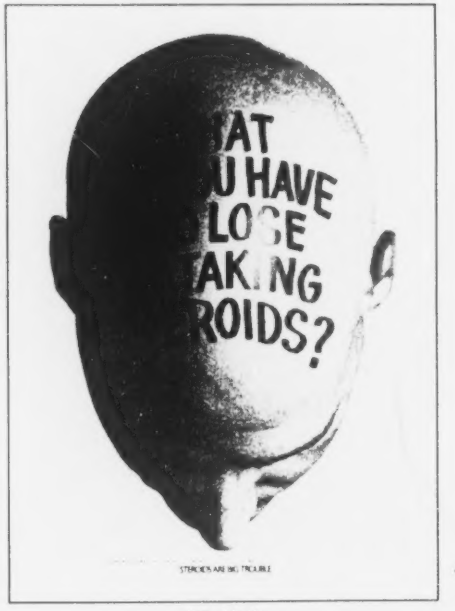


"Jock"



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Baldy	QTY.____ x $5 = $____	Male Breasts	QTY.____ x $5 = $____

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Mail check or money order (including $3.25 shipping and handling) to: Steroids Are Big Trouble, 516 15th Avenue South, Minneapolis, MN 55455

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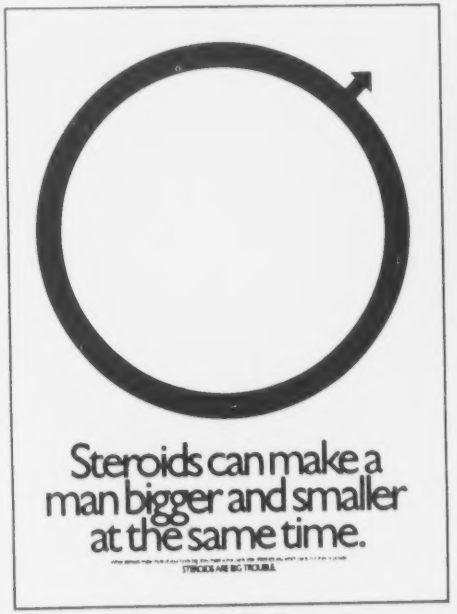

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March 31, 1989

Re: Steroids

Dear Player:

This will advise you of NFL policy for 1989 regarding anabolic steroids and related substances.

Past NFL drug policy has condemned and prohibited the use of these substances, and educational information has been provided as well. There is now a substantial consensus on several key points: (1) that steroids can give a competitive advantage to athletes who use them; (2) that steroid use may increase the risk of injuries both to the user and to other players; and (3) that steroids may result in other very significant health risks, both in the short run and in years to come. I am quite concerned about both the competitive aspect and the implications of steroid use for the health and welfare of players and their families.

The use of anabolic steroids and related substances constitutes, in my judgment, conduct detrimental to the National Football League. It is clearly detrimental to the integrity of professional football and to public confidence in it.

All NFL players will be tested for anabolic steroids and related substances, and for "masking agents" used to try to suppress their detection, in 1989 pre-season training camps or at any later time they may report. Lists of banned substances are enclosed for your information. If you are or have been taking any of the masking agents, you must, at the time of your pre-season training camp test, declare that fact and supply an appropriate written explanation from your physician; if you do not do so, a positive result for any masking agent will be treated as positive for a banned steroid and carry the same consequences.

The combination of health and safety risks and competitive advantage on the playing field distinguishes steroid use from the use of so-called street drugs and from alcohol abuse. Accordingly, a positive pre-season test this year will result in your being removed from your club's training facility, placed on Reserve/Non-Football Illness, and prohibited from any further participation with the club for a minimum of 30 days from the time you are advised of the test result, or until your system is shown to be clear of steroids and/or masking agents, whichever is later.

A positive test will also mean that you will be subject to frequent reasonable-cause testing in the future, as players who have previously tested positive already are. If you again test positive this year for steroids or related drugs, or for a masking agent, you will be suspended for the rest of the season (including any post-season play).

Please be guided by this information and avoid the adverse risks and consequences, to yourself and others, that steroid use entails.

Sincerely,

PETE ROZELLE
Commissioner

PR/ip

Enclosures (3)

ENCLOSURE #1

The following androgenic anabolic steroids and related growth- and performance-enhancing substances are prohibited in the National Football League.

Generic Name	Trade Name
Bolasterone	
Boldenone	Equipoise (veterinary product)
Clostebol	Steranabol
Fluoxymesterone	Halotestin
Mesterolone	
Methandienone	Dianabol
Methandriol	
Methenolone	Primabolan
Methyltestosterone	Android
Norethandrolone	
Norethindrone	
19-Nortestosterone	Nandrolone, Deca-Durabolin
Oxandrolone	Anavar
Oxymesterone	Theranabol
Oxymetholone	Anadrol
Stanozolol	Winstrol
Testosterone	Everone, Andronate

And related substances

ENCLOSURE #2

The following diuretics and related substances are often used in an attempt to mask the presence of androgenic anabolic steroids. Any player who uses one or more of these substances must declare that fact at the time he is tested under the NFL Drug Policy, and he must supply at the same time a written explanation from a physician to support the player's medical need for such substance(s).

Generic Name	Trade Name
Acetazolamide	Amilco
Amiloride	
Bendroflumethiazide	Aprinox
Benzthiazide	Aquatag
Bumetanide	Burine
Chlorthiazide	Diuril
Cyclothiazide	Anhydron
Ethacrynic Acid	
Flumethazide	
Furosemide	Lasix
Hydrochlothiazide	Aprozide
Hydroflumethazide	Leodrine
Methyclothiazide	Aquatensen
Metolazone	Zaroxolyn
Polythiazide	Renese
Probenecid	Benemid
Quinethazone	Hydromox
Spironolactone	Aldactone
Tiamterene	Jatropur, Dytac
Trichlormethiazide	Anatran

And related substances

Senator THURMOND. There is no question in your mind regarding the dangers of steroids, I presume?

Mr. ROZELLE. None.

Senator THURMOND. And, I presume, on the part of the coaches and trainers that it causes heart trouble, causes liver trouble, it causes sterility and other troubles that I understand have a potential to be caused.

Mr. Rozelle, in your statement you discuss the recently announced anabolic steroids testing procedures instituted by the NFL. You discuss the difficulty of instituting random testing procedures.

To what extent is steroid testing an issue in the current collective bargaining negotiations, and do you think that the NFL owners plan to fight the random testing of all players?

Mr. ROZELLE. I think if we could resolve some of the economic-type issues, the owners management council group, with the players association, I would think, having talked to the president of the players association, Gene Upshaw—I think we will hear from him today—but if we got rid of some of these major financial issues, I have always found Gene to be very concerned about drug use, and I think it's possible that we could execute a stronger policy with the players association approval.

Now, that is just my conjecture. Gene can speak for himself. But I think that would be possible, what you suggest, Senator.

Senator THURMOND. Coach Noll, you have certainly enjoyed great success over the years as a coach in the NFL. In your many years as a coach, you have certainly witnessed the growth of professional football and certainly the increase in strength and size of its players.

From your experiencing, assuming some increase in size of players is due to steroids, when did the abuse of steroids first enter professional football and how quickly has it spread?

Mr. NOLL. To my recollection, I would say it started probably with the advent of weight training, which happened in about the mid-1960's. As I said in my opening statement, I think the Olympic weight training schedules that football players started into, some of them were exposed to steroids at that time—in small doses, I might add, in regulated doses. And the problem really arose or arises from the mega doses. When they are in their hands, they think if one is good, five is better. And that is really where the health problems come into play.

Senator THURMOND. Coach Noll, is there too much pressure on college athletes to make it in the professional ranks, do you think?

Mr. NOLL. Senator, pressure is something you put on yourself, and I don't think there is any outside force that makes anybody do anything. I think that is true of any human endeavor.

Senator THURMOND. Coach Schottenheimer, we are all in agreement that the use of anabolic steroids can cause physical problems for athletes. As I mentioned, it can cause heart disease, liver disease, cancer, sterility.

And despite this fact, do you believe some teams that are aware of steroid abuse have allowed it to continue despite its effect upon the players, society, and the integrity of the game?

Mr. SCHOTTENHEIMER. Senator, I am of the opinion that in the National Football League today there is no evidence that management supports in any way the use of these anabolic steroids. I don't think that there is any question that there is a realization on the part of the league throughout that it is a problem that needs to be addressed, and we have discussed earlier certain remedies that we feel might reach that end.

Senator THURMOND. Do you think that management is doing all it could? Is it going over and beyond the call of duty, so to speak, to take steps to try to prevent the use of steroids?

Mr. SCHOTTENHEIMER. I believe that the process is clearly under way, Senator, in that regard. As I suggested earlier, there are alternatives to steroids, and that educational process, in my mind, must be made available to players so that they can realize what they consider to be their optimum skills as players.

Senator THURMOND. Now, are the coaches today showing pictures or slides pointing out the dangers to these players by using steroids?

Mr. SCHOTTENHEIMER. I can't speak for the other clubs in the league, but our strength and conditioning program includes discussion with players specifically as to the negative results that can occur and also to the positive gains that can be made under a supervised, high-intensity training program.

Senator THURMOND. Do you think it would be helpful if all the coaches of all the teams would feel this matter is of such grave importance to the life and health of individuals that they ought to give such training?

Mr. SCHOTTENHEIMER. I certainly think so.

Senator THURMOND. Then what would you suggest to begin to initiate such a program?

Mr. SCHOTTENHEIMER. Well, the basic premise has to begin with the coaches, and I think that discussions among the coaches either individually or collectively could move to that position so that we in fact could establish these conditions and the importance of what we are addressing.

Senator THURMOND. Thank you.

Mr. Moyer, I believe we have something in common: we are lawyers. As legal counsel to the NFL, you are aware of the new Federal legislation banning the distribution of steroids, aren't you?

Mr. MOYER. Yes, sir.

Senator THURMOND. Have you put out any directions to the coaches and teams to this effect?

Mr. MOYER. Senator, that was done many years ago. Approximately 15 years ago, the commissioner condemned the use of anabolic steroids and instituted a prescription drug monitoring program that focused on drugs like steroids that are under the Controlled Substances Act, and the clubs have been monitored, closely regulated, and prohibited from distributing any of those for nonlegitimate medical purposes.

So, I think we really in that sense preempted long ago a specific response to the new statute.

Senator THURMOND. Do you think it would be helpful—you know, you have to continually remind people, teachers have to do it in the classrooms, remind the students, supervisors have to do it, the

heads of my office have to continually remind those under them—of such matters that are important and what they should do.

I was just wondering, do you think it would be helpful if at intervals you would put something out to remind them again of the importance of this?

Mr. MOYER. I totally agree, Senator. I believe that is already done between the league's drug advisor and the individual team doctors. But I will be personally certain that it is done again because you are right, people do need reminding.

Senator THURMOND. Do you know whether any players have ever been authorized the use of steroids for medical reasons or not?

Mr. MOYER. We heard stories from a time back in the 1960's that some teams were doing it. And that, in fact, is what the commissioner came down hard against about 16 years ago. I don't personally know of any team in recent years that has cooperated or authorized or provided these substances at all, no.

Senator THURMOND. The NFL may choose to push for mandatory random testing of its players. Would you discuss the difficulties you would foresee about that in trying to institute such a policy?

Mr. MOYER. If you will allow me a personal opinion, I don't think there is any real question that random testing, meaning testing that is at once unscheduled and without regard to prior reasonable cause, is the best way to detect drug use and the best deterrent to drug us.

All that said, I think there might well be very significant legal problems if we attempted to simply force that on the players association, at least without having gone through more efforts than have been so far to foster the whole collective bargaining process, and see if we can reach an agreement because there is no question that an agreement between management and labor is an effective, united front that would send a message out to drug users and send a message out to the rest of the world without challenger and far better than a unilaterally imposed program could do.

Senator THURMOND. I believe we now have a law on the books providing random testing for railroad engineers. You know of the big wreck that occurred here several years ago between here and New York. And bus drivers and pilots. And I just was wondering how the NFL would feel maybe if it had random testing.

Mr. MOYER. Senator, we don't have as direct an impact on the public safety as do railroad conductors and bus drivers and folks like that. But from what all of you gentlemen articulated, the values that sports is meant to promote and do promote at their best, if you feel as a legislative matter that those values are important enough to authorize random testing, again my personal opinion is that it is the best deterrent and the best method of detection for drug use.

And the commissioner's program, as he said in his statement, had unscheduled testing as its centerpiece. That was knocked out by an arbitrator in a grievance filed by the players association, and we are operating currently with what is left after that arbitration decision.

Senator THURMOND. Well, I want to express my appreciation to all you gentlemen for the steps you are taking along this line. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. I am going to yield to Senator Kohl, but indicate, Coach Schottenheimer, you have a 12 o'clock flight, is that correct?

Mr. SCHOTTENHEIMER. I could always change that.

The CHAIRMAN. There may not be a need to change it. I would suggest, if you have questions for Coach Schottenheimer, maybe you could start with him.

I will ask my two colleagues here if they have any questions for you to try to accommodate your flight, if we could.

Mr. SCHOTTENHEIMER. Thank you, Senator.

Senator KOHL. Thank you, Mr. Chairman.

I don't come here, as you know, gentlemen, with the senatorial experience which is so important and so valuable, but I have been in business for most of my life. I also happen to own a professional sports team which is in the process of winning an NBA championship this year. [Laughter.]

In my unbiased, impartial view.

But I would like to get at what I think one of you mentioned, which is all the money that is involved in professional sports and the kind of abuses and excesses that it leads to. I think one of you said, and I think we would probably all agree, that one of the reasons, perhaps the major reason for the abuse of steroids is that, A, some believe that it enhances performance and, B, that enhancement of performance then leads to fame and fortune of significant magnitude.

Is that reasonable?

Mr. SCHOTTENHEIMER. I believe Chuck expressed that, and I would defer to him in that regard.

Senator KOHL. All right. Let's see if we can't follow that through. So, it's understandable how some young people, misguided as they may be, would get involved in the use of steroids in the pursuit of fame and fortune. That is reasonable to assume.

OK. Now let's talk about management. I have been part of management all my life, and you gentlemen are part of management. Their performance enhancement in the pursuit of fame and fortune, if they are under your direction, leads also to your enhancement of fame and fortune. Isn't that true?

Mr. SCHOTTENHEIMER. I would agree with that statement.

Senator KOHL. So, then would it be correct to assume that to some extent management and ownerships 'pursuit of fame and fortune, relates considerably to the players performance? Isn't their responsibility also our own responsibility and if there is some guilt and problems that need to be resolved, it is not just with players who look for fame and fortune, however legal or illegal, moral or immoral it may be, it is also a problem that management has to face and discuss and resolve?

Mr. SCHOTTENHEIMER. If you go on the premise that it is performance enhancing, the issue that you address I think is true. However, I am of the opinion, and it is only my opinion, that the use and abuse of steroids, while it in fact will unequivocally produce size and strength, there are other skills relative to our sport that it does absolutely nothing for, and those skills would be speed and agility.

So, I don't necessarily concur that an individual who utilizes these steroids is going to ultimately find that his size and strength is going to be manifested in better performance on the field.

Mr. KOHL. Well, with all due respect, I think there is an opinion in sports that kids who use steroids have an edge. They believe it, and I would guess that some coaches believe it. Some management, some owners believe it. And I think it is this whole chain of belief in steroids and their ability to enhance performance that is the cause of it all, because there is so much money involved, so much fame and fortune involved.

Would you agree that really you are going to have a united approach to it? The players all by themselves, or the union all by themselves, or management all by itself cannot resolve the problem. It has got to be a recognition by management and the players that both are involved, both have a responsibility, both share some guilt if there is guilt involved.

Mr. SCHOTTENHEIMER. All of us involved in sports, whether it be amateur or professional, have a responsibility to address it either individually or collectively to be able to achieve the objective which you seek, and that is the elimination of anabolic steroids in our game.

Mr. KOHL. OK. Just one question for you, Commissioner.

You have said that as far as you are concerned and ownership is concerned, random testing is often necessary to see to it that it is not being used and abused. It is something that the NFL management group without question wants to see instituted.

Commissioner ROZELLE. That is right. That is correct.

I have never had an owner or a coach try to pressure me in the slightest insofar as the decision I had to make relative to street drugs, steroids, anything else. I have had no indication that they would foster that in any way. And I make my decisions and they abide by them.

Mr. KOHL. I believe that.

So you would say that we can eliminate the use and abuse of anabolic steroids in professional football if the union agrees?

Commissioner ROZELLE. I would say that if the management and union would agree, we could eliminate it or eliminate the players abusing them.

Mr. KOHL. So that, in your judgment, is the key. It is not a question of management's willingness to sign it up today. The problem is that so far the player group has not been willing to make that decision along with you.

Commissioner ROZELLE. I do not think the player group has refused to cooperate in a drug program. Our problem in sports, in the NFL, is that we do not have a collective bargaining agreement.

We had a strike in 1987, and since then they have been unsuccessful in getting a collective bargaining agreement.

Now, when they can resolve some of these other economic issues, I sincerely feel, just my assumption, that Mr. Upshaw and other members of the Players Association will agree to some sensible drug program that will be more comprehensive than we now have.

Mr. KOHL. That is very encouraging. Thank you.

Senator Specter.

Senator SPECTER. Thank you very much, Senator Kohl.

Picking up on the issue of the potential agreement between management and the players on random steroid testing, it might be possible to get that agreement, aside from a collective bargaining agreement on all of the other issues.

I think you have had a very forceful statement from a number of Senators this morning as to our concern on the importance of this issue.

We appreciate the difficulty which all of you face, which the Commissioner faces, and your counsel, Mr. Moyer, faces, and which Mr. Upshaw faces as being the representative of the Players Association, as to how far you can go on the delicate legal issues which are involved.

But this hearing may be some support, at least from the views of a number of Senators who have studied this problem. We think it is a matter of utmost importance. We would strongly encourage you to move ahead for a random testing program.

You have a number of alternatives. One is to come to an agreement on it, and you could come to an agreement without agreeing on all of the other complex issues which are present between the league management and the Players Association.

Another alternative is to seek a declaratory judgment action where you have enough of a case in controversy, I think, to quality for a declaratory judgment action. That's something that would have to be decided by your lawyers after study of the specifics.

But here you have an issue on drug testing, which is a major American problem. It has been addressed recently by two Supreme Court decisions, one involving the engineers and those involved in public safety, and the other involving people in the drug field on law enforcement. One was a seven to two decision and one was a five to four decision. It may well be that there is ample precedent in those decisions to move ahead, to put a drug program random testing into effect.

We are all concerned about constitutional rights, and no one more so than this Senator. Football does have a very unique position. Football was the beneficiary of special treatment under our laws, special treatment under the antitrust laws, special treatment in many respects. Beyond the legal framework, a special treatment in the eyes of Americans. It is a little different kinds of an employment contract that football players have.

Maybe they are not in quite the same situation as a railroad engineer. In that seven to two decision, the Court went very far in moving away from particularized probable cause on an individual. The traditional standard on the search and seizure test to a generalized standard where there were accidents in many railroad situations so that engineers were held to a little different standard.

These issues are complicated, but it is my thought that the problem is sufficiently serious so that you really ought to pursue that, either by agreement or by declaratory judgment action where you can have a court set, listen to the evidence in a much more detached way than we are here today, and in an objective context make a decision as to constitutional rights. That is the American way to adjudicate these kinds of issues; and it is an instance where I would urge you to proceed along that line.

Let me ask a question of the two coaches. On the use of steroids on the psychological factor, Americans have a passion for professional college, for college football, high school football. Perhaps a special passion for professional football because it has a strain of violence and a strain of competitiveness which is extraordinary. The game is very different from the 400 level where I have had season tickets for a long time as opposed to being on the sideline. On the occasions when I have had a chance to be on the sideline or seen some of the films on the sideline, it is a very revealing process in terms of the violence that is present in the game.

We lawyers talk about reasonable force to accomplish the purpose. That is all a policeman can use, is reasonable force. I have often wondered, at the level of force, as to how it comports with our standards of reasonable force, and I have concluded that you cannot set a standard or reasonable force on a football field. We all believe in hard hitting. We believe in that in government and in politics and in life, hard but fair hitting, and the hitting is just incredible at the field of contact.

If players are using that hard hitting, as Coach Noll says, because it is their spirit and you cannot contain spirit an fair play, so be it. But the question which I would like to address to the two coaches is, does the use of steroids affect more than the physical prowess on the muscle building and on the speed? There is a translate beyond that, on the psychological level, that men in professional football who use steroids move beyond the physical level to push harder on the psychological level, does it inject totally additional elements psychologically to a game with extraordinary violence and perhaps commendable violence, or certainly acceptable violence, because we fill the stadiums and we fill the TV viewers 'booths.

I would like to start with you, Coach Noll. Does, in your opinion, the use of steroids add an extra degree of psychological violence which perhaps may be excessive?

Mr. NOLL. I have read about that kind of stuff or I have heard about violence off the field as a result of the use of it. But I have really never experienced it. In fact——

Senator SPECTER. I mean on the field, Coach Noll.

Mr. NOLL. Well, that is what I am trying to get to.

But I have never in my experience of the few people that I have known who used it, it has not translated to any action on the field. It is translated to action in the weight room, to a narcissistic effect on their own body, and really has not translated to any kind of action on the field. In my experience, that has not been a fact.

Senator SPECTER. Do you think, Coach Schottenheimer, that there is a psychological element adding to the steroids that produces extra violence, perhaps excessive violence?

Mr. SCHOTTENHEIMER. The information that I have with regard to the medical aspects of it that there may in fact be a manifestation of that in the weight room, the high intensity of their training.

But I, as with Chuck, have not seen the evidence of those people on the field that there was an abnormal amount of overaggressiveness of violence.

Senator SPECTER. Could there be an abnormal amount of overviolence or aggressiveness in professional football, in your opinion?

Mr. SCHOTTENHEIMER. I think not. I am of the opinion that that is not the case.

Senator SPECTER. I reserve some of my time on a related subject on which I have alerted Commissioner Rozelle.

We have had a variety of hearings in this committee room, mostly in support of professional football. At the request of Commissioner Rozelle, going back to 1982, with the transfer of the Raiders from Oakland to Los Angeles, this committee has tried to help on the antitrust aspects to give professional football reasonable regulatory approaches.

One of the subjects where we may have other hearings but have not had them scheduled yet is on the issue of pay television which is of major concern to this Senator and to many others in the Congress, and it is a related subject. I have alerted Commissioner Rozelle that I will ask him this question.

I have been concerned about ESPN as it opens the door to pay football, albeit in a very carefully controlled context. You have to pay to get ESPN. I am concerned about the possibility of pay-per-view on the Super Bowl, for example, when this would be not only in football, but in baseball on the World Series.

Recently Commissioner Rozelle met with me and Mr. Modell, who is head of the NFL committee on this issue. We talked about pay-per-view television, and the concerns which I have expressed turn on the high prices for football teams. I have a hard time seeing how the Dallas Cowboys are worth either $140 million or $180 million, whatever, if someone is not looking at pay-per-view TV and looking at the interest in the Super Bowl. It would be modest to bring a half a billion dollars, $500 million, for the Super Bowl if it were to go to pay-for-view TV for $10 a household.

When Commissioner Rozelle and Mr. Modell and I and Norman Bramin met on the subject, and Dan Rooney as well, we talked about this. Commissioner Rozelle and Mr. Modell both expressed the view that pay-per-view TV was not imminent, they would not expect it projecting ahead with some reasonable view to the year 2000. I would like the Commissioner's comments, ratification, confirmation of my representation on the record.

Commissioner ROZELLE. The National Football League will have a new series of new television contracts starting in 1989. And we are considering no pay-for-view, no pay television.

And while I will be gone sometime this summer, I am sure the new Commissioner will be well aware of your feelings and those of your compatriots here in the Congress. And they would be well advised to heed them.

The CHAIRMAN. Excuse me. May I ask, Coach, is there a time for you to make that plane at all?

Mr. SCHOTTENHEIMER. No concern. Thanks for your consideration, Senator. That is not necessary.

The CHAIRMAN. OK. I am sorry. Go ahead then.

Senator SPECTER. I would like your specific confirmation, Commissioner, providing, of course, you agree with the accuracy of our discussions among you, Mr. Modell, me and the others I have identified, but there is no current plan for pay-per-view TV, and that is we project ahead. We talked about the year 2000 as an anticipatable view.

I know you cannot commit the future, Commissioner, what events will happen, but at least as we met in my office recently and as you view the situation at the moment.

Commissioner ROZELLE. I do not think the thinking will change from the views we expressed to you that day.

Senator SPECTER. And they were as I represented them?

Commissioner ROZELLE. No foreseeable plans for pay television.

Senator SPECTER. Did we talk about the year 2000?

The CHAIRMAN. Are we talking about steroids, Senator?

Senator SPECTER. Well, I am using part of my time, Mr. Chairman. I shall not dwell on this unduly. But, as you know, I have sought a hearing on this subject, and we spent about 4 minutes on it.

Commissioner ROZELLE. It is my feeling that the National Football League will not embrace pay television before 2000, if then.

Senator SPECTER. All right. Thank you very much, Commissioner.

One final question. This is for you, Mr. Moyer.

On the subject of the implication of the two recent Supreme Court decisions, have you had occasion to review those decisions and the rationales therein with a view to the constitutionality if agreement is not reached through collective bargaining, which I concur would be the best, and perhaps we will have a chance to talk to Mr. Upshaw about that, as to whether those cases provide a legal support for a league rule on random steroid testing?

Mr. MOYER. I have read of the cases, Senator. I have not analyzed them sufficiently in my own mind to express an opinion on whether their rationale is translatable in the professional sports.

Senator SPECTER. Well, just one suggestion of one lawyer to another, I would ask you to do that to see if there is a lawful basis in the preservation of constitutional rights as you read it for that kind of result.

Commissioner ROZELLE. In that respect, I will say that we have been shying from any such action. We have not considered the one you cite specifically, which would be a possibility.

But we have been reluctant to impose any further limitations, restrictions, or sanctions on players while a collective bargaining agreement has not been reached. We felt that the main thing would be for the management, counsel and the owners to reach an agreement on collective bargaining. And we have not wanted to hinder that by taking any actions that would thwart it, yet realizing, as you suggested, that this is a very serious matter, and may well have to be taken up by the next Commissioner if they do not reach a collective bargaining agreement.

Senator SPECTER. Well, Commissioner, I appreciate the sensitivity in my final comment, and I do not disagree. In fact, I think it is preferable to use every conceivable alternative before you take any unilateral action. And unilateral action only and the most careful study and the most careful consideration for the constitutional rights of the players. They are entitled to every consideration.

It might be that the declaratory judgment route would be a further insulation, but it seems to me that those cases ought to be analyzed with a specific view as to what the authority is in the field so you know where you stand. That is my only suggestion.

Commissioner ROZELLE. Your views and the views of the rest of the committee expressed this morning I think are very helpful to us in resolving the problem.

Senator SPECTER. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Grassley.

Senator GRASSLEY. Mr. Chairman, thank you very much. I want to put my entire opening statement in the record.

The CHAIRMAN. Without objection.

OPENING STATEMENT OF SENATOR CHARLES E. GRASSLEY

Senator GRASSLEY. But I do want to refer to a few paragraphs of it, because I want to know what you think we in the Congress ought to do in this area.

For instance, do you see the need for specific Federal legislation, or do you just see a need for some kind of an expanding Federal role on this specific issue we are discussing here this morning?

Today's hearing focuses on another dimension of a society seemingly hooked on drugs. However, unlike shootouts at crack houses or turf battles on city streets between rival drug gangs, steroid abuse does not result in the crimes of violence that other substance abuse seem to generate. Rather, the abuse of steroids silently infiltrates and ultimately destroys individuals with the lure of success through the enhancements of the body's physical attributes.

Just as an earlier generation was told the lie that illegal drug use would "expand" one's mind, today's steroid abusers is promised unmatched physical growth and prowess. In each case, the lie could not be more profound or dangerous.

The abuse of steroids causes concerns because of the widely documented and adverse physical and psychological effects on the body.

However, in our rush to declare war on another drug, we must also be mindful of our obligation to the right of those who must use steroids due to existing medical conditions or legitimate uses of similar substances that have been tested and approved for use in the production of livestock.

Quite apart from any further legislative enactments from Washington, our academic and athletic communities would do well to increase their resolve and self-discipline in the area of substance abuse in general, and in the area of illegal steroid use in particular.

Young people aspire to become like many of the sports and entertainment personalities of the day. Whether they like it or not, these folks are models for youngsters from any walk of life, and like it or not, they will be held to a higher standard of conduct by the public in general.

We must return to traditional long-standing notions of individual responsibility for the consequences of one's action. Certainly we need compassion for those former abusers of steroids who seek rehabilitation. But we need to determine what, if any, is the proper role for the Federal Government in enacting and imposing sanctions against the activity of those individuals.

Ultimately, our oversight should ensure that the Federal Government's role in this area is legitimate and necessary.

[The prepared statement of Senator Grassley follows:]

STATEMENT OF SENATOR CHARLES E. GRASSLEY

ON THE ILLEGAL USE OF STEROIDS
SENATE JUDICIARY COMMITTEE HEARING
MAY 9, 1989

.....

MR. CHAIRMAN, THANK YOU FOR HOLDING THIS HEARING ON THE USE AND ABUSE OF STEROIDS.

TODAY'S HEARING FOCUSES ON ANOTHER DIMENSION OF A SOCIETY SEEMINGLY "HOOKED" ON DRUGS.

HOWEVER, UNLIKE SHOOT-OUTS AT CRACK HOUSES, OR TURF BATTLES ON CITY STREETS BETWEEN RIVAL DRUG GANGS, STEROID ABUSE DOES NOT RESULT IN THE CRIMES OF VIOLENCE THAT OTHER SUBSTANCE ABUSE SEEMS TO GENERATE.

RATHER, THE ABUSE OF STEROIDS SILENTLY INFILTRATES -- AND ULTIMATELY DESTROYS -- INDIVIDUALS WITH THE ALLURE OF SUCCESS THROUGH THE ENHANCEMENT OF THE BODY'S PHYSICAL ATTRIBUTES.

JUST AS AN EARLIER GENERATION WAS TOLD THE LIE THAT ILLEGAL DRUG USE WOULD "EXPAND" ONE'S MIND, TODAY'S STEROID ABUSER IS PROMISED UNMATCHED PHYSICAL GROWTH AND PROWESS.

IN EACH CASE, THE LIE COULD NOT BE MORE PROFOUND, OR DANGEROUS.

THE ABUSE OF STEROIDS CAUSES CONCERN BECAUSE OF THE WIDELY DOCUMENTED AND ADVERSE PHYSICAL AND PSYCHOLOGICAL EFFECTS ON THE BODY.

WITH THE ENACTMENT OF THE ANTI-SUBSTANCE ABUSE PREVENTION ACT OF 1988, ANYONE WHO IS FOUND GUILTY OF ILLEGALLY DISTRIBUTING ANABOLIC STEROIDS -- FOR REASONS OTHER THAN MEDICAL -- SHALL BE PUNISHED AS A FELON AND BE SENTENCED TO UP TO THREE YEARS IN PRISON.

THOSE WHO ARE FOUND GUILTY OF DISTRIBUTING STEROIDS TO MINORS, SHALL BE SENTENCED FOR UP TO 6 YEARS.

UNDER THE ACT, THE COMPTROLLER GENERAL IS TO STUDY THE LEGAL AND ILLEGAL USE OF STEROIDS AND TO REPORT TO CONGRESS NO LATER THAN JUNE 1, 1989.

IN THE MEANTIME, SOME AMERICANS HAVE BECOME INCREASINGLY CONCERNED THAT HARMFUL STEROIDS ARE PASSED THROUGH THE UNITED STATES MAILS.

ONE RESPONSE TO THIS ISSUE IS A MEASURE -- S. 466 -- BY SENATORS BIDEN AND THURMOND. THEIR PROPOSAL WOULD PROVIDE PENALTIES FOR SELLING OR SOLICITING THE SALE -- BY USE OF THE MAILS -- OF ANABOLIC STEROIDS.

RECENTLY, THE HOUSE JUDICIARY SUBCOMMITTEE ON CRIME HELD A HEARING ON SIMILAR LEGISLATION, H.R. 995.

AS WE KNOW, SENATOR BIDEN HAS ALSO PROPOSED THAT STEROIDS BE ADDED TO THE LIST OF "CONTROLLED SUBSTANCES", THUS TREATING THEM THE SAME WAY WE TREAT OTHER DANGEROUS DRUGS, SUCH AS COCAINE AND HEROIN.

HOWEVER, IN OUR RUSH TO DECLARE WAR ON ANOTHER DRUG, WE MUST ALSO BE MINDFUL OF OUR OBLIGATION TO THE RIGHT OF THOSE WHO MUST USE STEROIDS DUE TO EXISTING MEDICAL CONDITIONS AND OF THE LEGITIMATE USES OF SIMILAR SUBSTANCES THAT HAVE BEEN TESTED AND APPROVED FOR USE IN THE PRODUCTION OF LIVESTOCK.

QUITE APART FROM ANY FURTHER LEGISLATIVE ENACTMENTS FROM WASHINGTON, OUR ACADEMIC AND ATHLETIC COMMUNITIES WOULD DO WELL TO INCREASE THEIR RESOLVE AND SELF-DISCIPLINE IN THE AREA OF SUBSTANCE ABUSE, IN GENERAL, AND IN THE AREA OF ILLEGAL STEROID USE IN PARTICULAR.

YOUNG PEOPLE ASPIRE TO BECOME LIKE MANY OF THE SPORTS AND ENTERTAINMENT PERSONALITIES OF THE DAY. WHETHER THEY LIKE IT OR NOT, THESE FOLKS ARE MODELS FOR YOUNGSTERS FROM ANY WALK OF LIFE; AND LIKE IT OR NOT, THEY WILL BE HELD TO A HIGHER STANDARD OF CONDUCT BY THE PUBLIC IN GENERAL.

WE MUST RETURN TO TRADITIONAL, LONG-STANDING NOTIONS OF INDIVIDUAL RESPONSIBILITY FOR THE CONSEQUENCES OF ONE'S ACTIONS.

CERTAINLY, WE NEED COMPASSION FOR THOSE FORMER ABUSERS OF STEROIDS WHO SEEK REHABILITATION.

BUT WE NEED TO DETERMINE WHAT -- IF ANY -- IS THE PROPER ROLE FOR THE FEDERAL GOVERNMENT IN ENACTING AND IMPOSING SANCTIONS AGAINST THE ACTIVITIES OF THOSE INDIVIDUALS.

ULTIMATELY, OUR OVERSIGHT SHOULD ENSURE THAT THE FEDERAL GOVERNMENT'S ROLE IN THIS AREA IS LEGITIMATE AND NECESSARY.

HOWEVER, CONGRESS SHOULD NOT NECESSARILY INJECT ITSELF IN THIS DEBATE JUST BECAUSE CERTAIN CELEBRATED FIGURES HAVE ABUSED STEROIDS.

TO DO SO, PATRONIZES THOSE WHO HAVE -- TRAGICALLY -- THROWN AWAY THEIR GOD-GIVEN TALENTS FOR SHORT-TERM GAINS; AND IT INSULTS THE AMERICAN PEOPLE WHO EXPECT US TO DIRECT OUR ATTENTION TO SOLVE THE MOST PERNICIOUS EVILS OF DRUG ABUSE THAT NOW CURSE ALMOST 24 MILLION OF OUR FELLOW CITIZENS.

I WANT TO WELCOME EVERYONE TO OUR PANELS TODAY, AND I LOOK FORWARD TO THEIR OBSERVATIONS.

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Senator GRASSLEY. So, gentlemen, is there a need for a greater Federal role in preventing steroid abuse?

Generally, I want to know if any of you favor or are asking for any additional Federal legislation.

Commissioner ROZELLE. I think that it is up to us to try and clean our own house of this problem first initially. We obviously would like all the help we could get, but I think it would be reaching a little bit to ask for legislation at this time. But I think that we have to get the cooperation of all elements of each sport and try to solve the problem ourselves first before going to legislation.

Senator GRASSLEY. Would any of the coaches want to respond further?

Mr. NOLL. I agree with the Commissioner.

Mr. SCHOTTENHEIMER. I would echo the Commissioner's statement.

Senator GRASSLEY. Why would someone administer steroids to a subject without legitimate medical reasons?

Commissioner ROZELLE. There would be no reason. If we found it in the National Football League, there would be a trainer without a job for awhile, I will tell you that much.

Senator GRASSLEY. Well, is there no medical code of ethics that prevents an athletic trainer from improperly administering steroids?

Commissioner ROZELLE. We have policies in the National Football League that would preclude it.

Senator GRASSLEY. To what extent are we here today because of the permissiveness of mentality of "Do your own thing as long as you do not hurt anyone else," and the abdication by individuals of responsibility for the consequences of their own acts, or is it greater than that?

Commissioner ROZELLE. I think that we have to do all we can to save them, save the individual athlete from the consequences of lengthy steroid use. And I think we owe it to our sport to get rid of steroids so that these role models will not cause young athletes in high school and college to take up steroids.

Senator GRASSLEY. Bill Bennett, as you know, the new Director of the National Drug Control Policy, has stated that to prevent drug use from expanding, a user must be treated firmly so that he or she cannot involve nonusers, and so that his or her drug use ceases.

Recently Dr. Bennett said, and I quote, "Those who use, sell or traffic in drugs must be confronted and they must suffer the consequences."

Drug prevention obviously rests on the teaching that drug use, however casual, or with whatever substance, is wrong and that it poses dangerous risks, both to those who take them and to society as a whole.

My question is, beyond just the passage of criminal statutes, and the punishment that comes with the enforcement of these statutes, is there a role for the Federal Government here? I am not necessarily advocating a greater role, but I see the Federal Government, and particularly national leaders, as role models, like athletes are to some extent. Although we are not prized or praised like they are.

The CHAIRMAN. Nor paid.

Senator GRASSLEY. What would you say or what advice would you have for the Federal Government in instilling in individuals of our society some sense of responsibility or sense of right or wrong, along the lines of what Bill Bennett was getting at.

Commissioner ROZELLE. I think the best thing you can do is what you are doing today, have done before, and will do in the future, have hearings such as this. I think it is very helpful.

Senator GRASSLEY. So, even though you are not here to ask for a greater role, you think the process that we are going through is valuable to this end?

Commissioner ROZELLE. Extremely so.

Senator GRASSLEY. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Gentlemen, I have one last question. All of the people you have heard from, with the exception of Senator Grassley, indicated that the present testing program, although positive, may not yield the results that we are seeking—that is to determine who in fact is using steroids.

Let me ask you this one question. And, Commissioner, I know you have spoken to it before, but it is my last question.

How could a random testing program, from your perspective, be used or abused by management? What safeguards are built in to prevent management from abusing a random testing program if, by random, we mean they say, OK, "Biden is out of line today so we will check you today; Biden, we will check you tomorrow; Biden, we are going to check you next Thursday," just harassing.

By random do you mean a testing program when the entire team is tested occasionally? The league's counsel can speak to that if you want.

Commissioner ROZELLE. Well, in the first place, the clubs would not do it. They do not do the drug testing now. The league office does it. They have a collection of men there to watch the delivery of the urine sample and seal it. And a league employee takes them and ships them to the lab. So the team is involved.

And other than the cost, it is $100 a test. So we have almost a quarter of a million dollars we will spend initially on testing for steroids. That is just steroids. Street drugs will be another cost this summer. And another hundred for any indication of steroids that you try to get a confirming test on. So you are talking about quite a bit of money involved.

But the team is not involved. That is up to the league office. I think that is the way it should be.

The CHAIRMAN. Do you also choose the player to be tested? I know the present rules. You have to show positive.

What I am trying to get at is if there were random testing, would that random testing occur from the league, and that day the league would say today we are going to test Jones, and show up to test Jones, or would they say today we are going to test the Indianapolis, former Baltimore, Colts? [Laughter.]

Commissioner ROZELLE. We have not had that opportunity. But if we did, we would have to think it out frankly. We certainly would want to see that they are not harassed.

Mr. MOYER. Senator, just as an addendum, what the Commissioner proposed to do back in 1986, was not random testing. It was unscheduled testing.

Now, random testing is a word that is loosely used and it is pejorative when many use it. What it means to me is two things. As I said earlier, one is without any consideration of reasonable cause and it is unscheduled in time.

What the Commissioner proposed to do was simply unscheduled testing. And he proposed to do it for all players on a given team, and ultimately for all players in the league so they would not be singled out.

The CHAIRMAN. I see.

Mr. MOYER. And the feeling was that that would be a very good deterrent. That if you did it once, you might not even need to do it again, because they would remember that, and they would never know when the second one was coming and they would stay clean.

The CHAIRMAN. That does answer my question.

Gentlemen, I truly appreciate your testimony. As I said at the outset, there could be much more we could discuss on this, but this was not intended to be confrontational but informational. Well, we will see where these hearings do in fact take us. But, in the meantime, I applaud you for your efforts and hope you will intensify those efforts as coaches. Actually I do have one question for the coaches.

There are those who suggested that there is a mentality among team doctors that killing pain is an important function of a team physician, as you want those folks to be able to play. And the reason for the steroid mentality, to the extent that it exists among players, is not somehow disassociated from the notion of killing pain. If an athlete has a serious muscle pull, or a problem with his shoulder, the team doctor will shoot him up, and he will be able to play this game.

Is that fact or fiction?

Mr. NOLL. From our standpoint, that is fiction. Pain is analyzed to a great deal of, you know, our doctors, what is the pain there? Let me put it that way. I am not saying that shots for pain have not been given, but they are not given just to get rid of pain.

If pain is there indicating that someone should not play, then he is not going to play. If killing that pain will cause further injury, then it is not the way we want to go. If it is something that is minor, then that is done. But pain killing just for that is not done.

The CHAIRMAN. Is there not an incredible incentive on the part of someone who is trying to make your club, or who has made your club and has got some 300-pound rookie breathing down his neck, to say "Doc, I need a little help on this pain"? And the only way a doctor knows what the pain is—it is the one thing you cannot test very well—is what the player tells them.

The fact that pain killers are there does not put great pressure on the player to say, go ahead, Doc, give me the shot, and give a rationale for why the shot should be given?

Mr. NOLL. You know, in my experience, I do not think we have ever had anybody do that. When there is pain, and I am sure everybody in this room has experienced pain of some sort, it is there for a reason and you want to know the reason why. If there is a

good explanation for why it is there, and if it is saying do not play, you do not play.

We have had people not play in championship games because that kind of thing would have caused further injury and harmed them, and we are not interested in doing that.

Mr. SCHOTTENHEIMER. My experience has been that our medical staff has been quite autonomous in their decisionmaking with regard to (a) who should play and who will not play, and (b) if in fact some type of procedure should take place that would enable the player to play center.

The CHAIRMAN. Well, okay. All right. Thank you all very much for your testimony, and particularly you, Commissioner, for making what, as Commissioner, will probably be your swan song appearance before this committee. And I appreciate you altering your schedule to do that, all of your gentlemen.

And whatever plane you can catch now, coach, go to it.

Mr. SCHOTTENHEIMER. There are several on their way to Kansas City. Thank you, Senator.

The CHAIRMAN. Thank you all very much.

Let me announce the rest of the schedule for the next two panels. I think we can move relatively quickly. If panel 3, which is made up of the coaches, the college coaches, would like to go take a break without having to sit there in that front row while the second panel testifies, that is fine by me.

But we will go straight through with the next two panels.

Our next panel is made up of Gene Upshaw, executive director of the NFL Players 'Association; played for 16 years for the Oakland Raiders, and was inducted into the Pro Football Hall of Fame in 1987. He has been the executive director of the Players 'Association since 1983, and is on the executive council of the AFL-CIO.

And also Bill Fralic, who is a three-time all-pro offensive lineman with the Atlanta Falcons, and have suggested the best offensive lineman in the NFL, but I am not going to get in that fight as big as they all are.

And Steve Courson, a former starting lineman with the Pittsburgh Steelers and the Tampa Bay Buccaneers.

Welcome, gentlemen. And, Gene, if you have an opening statement and go down the line, and then get to questions.

STATEMENTS OF GENE UPSHAW, EXECUTIVE DIRECTOR, NFL PLAYERS ASSOCIATION; BILL FRALIC, THREE-TIME ALL-PRO OFFENSIVE LINEMAN, ATLANTA FALCONS, NFL PLAYER REPRESENTATIVE FOR THE FALCONS; AND STEVE COURSON, FORMER NFL PLAYER, PITTSBURGH STEELERS AND TAMPA BAY BUCCANEERS

Mr. UPSHAW. Yes, Senator. I have a written statement that I would like included in the record.

The CHAIRMAN. It will be included in its entirety.

Mr. UPSHAW. Thank you.

I take offense to the comment you made that Bill Fralic is the best offensive lineman in football. I still think I can play. [Laughter.]

The CHAIRMAN. As far as I am concerned, although the AFL-CIO has had some hard hitting, it is not football.

Are you going back this year to play?

Mr. UPSHAW. I have been thinking about it. I have been looking at some of the contracts.

The CHAIRMAN. All right. I can be your lawyer if you are considering it. [Laughter.]

All right, fire away.

Mr. UPSHAW. I first must say that it is virtually unanimous why steroid use is pervasive in sports. And it has to do with something that Senator Thurmond said, and it has to do with pressure. There is the pressure to earn money; there is the pressure to keep a job; there is pressure to keep ahead of competition; and there is the pressure to win.

And I sat through the last panel, and I have heard several comments that sort of disturbed me in some senses.

First, I must say that, on behalf of the Players Association, we have always been interested in a strong drug policy. We continually push for that. We think any strong policy should have education, should have testing, should have treatment, rehabilitation, confidentiality, and it should have penalties. And we have been in favor of that.

As Commissioner Rozelle has pointed out, we have not been able to work out a collective bargaining agreement on this and many other issues. But we are still willing and waiting for that opportunity. So far, it just has not happened.

I must say, over the course of my 10 years as executive director, I worked closely with Commissioner Rozelle on the drug program. I must say that before any player was ever suspended in the National Football League, regardless of the circumstance and where I might be located, I was contacted that he was going to take a particular action against a player.

But we do need a comprehensive program. Senator Kohl mentioned he is the owner of a basketball team. And NBA, I guess, is recognized in sports that they have a strong drug program because it is a jointly agreed-to program. Both management and labor have come together on something that makes sense for the industry. And that program does not have random testing. And I know that they are not addressing the issue such as steroids, but I still believe that it is not only isolated to football, it is in other sports as well.

I would say that, with the advent of weight training, year-round football today, the pressure to win, the pressure to stay ahead of the competition, to get that edge, we hear all of the cliches in football. Bigger is better. I heard Coach Noll mention pain. They also have other comments about that. It is a difference they tell a player between injury and pain, and there are certain things you do for one that you cannot do for the other.

As players, we all recognize that. As a young player that comes into the National Football League, or into any organized sport that wants to excel and do better, he first knows that he probably has to get into weight training, and that is usually where it all begins.

As I mentioned, every team now has a weight coach, a strength and conditioning coach. And the players are required in most cities, most teams to work out at least 3 to 4 days a week, and in

some cases our players are paid for those workout sessions. And they have to go to all of them to get paid for any of them. So that is the reason.

You have a young player, a young rookie that is trying to break into the NFL. And he is seeking that weight advantage to win a roster spot on the team. You have the established starter who is trying to become dominant on the field, and that might be a reason for that particular player to use steroids. And you have an older player who is hoping to gain strength and hold on to the new breed that is coming into the league, and that might be another reason that player does use steroids.

But it really comes down to the pressure, keeping up with the Joneses. It is something that is there. And no one has to tell you that you are not as strong as the guy that is front of you, and if you want to make this team, you need to gain some weight. It sort of is there.

And it is an institutional problem. It comes about by the win at all costs attitude. It is an awful lot of pressure put on a club owner, an awful lot of pressure put on a coach which eventually gets down to the player because it all turns on the player. Can he play on the field?

The coach is under pressure because he has to keep his job, and if he has a young talent, a guy out there that is right on the verge of becoming a superstar, and he needs that little extra push, quite naturally, there are ways to do it, and it is not by taking all of the vitamins in the world and eating all of the food that you can eat. There are other ways.

And it is no salvation for the college coaches. We have several in the room, and they are under a lot of pressure. It is all of our collective problem. It is something that we have to deal with. And as members of organized labor, as a trade unionist, I believe that it is something we have to do collectively, it cannot be done unilaterally, it has to be done with a joint interest in mind, and that is what is best for the athlete, the game and our country.

And we stand for that, and we are ready to lead in that agenda. We feel very committed to it. And I will be willing to answer any questions at a later point.

Thank you.

The CHAIRMAN. Thank you very much.

[The statement of Mr. Upshaw follows:]

STATEMENT OF GENE UPSHAW

EXECUTIVE DIRECTOR

NATIONAL FOOTBALL LEAGUE PLAYERS ASSOCIATION

BEFORE THE

COMMITTEE ON THE JUDICIARY

UNITED STATES SENATE

May 9, 1989

STATEMENT OF GENE UPSHAW

Mr. Chairman, and members of the Committee:

My name is Gene Upshaw. I am Executive Director of the NFL Players Association (NFLPA), the exclusive bargaining representative for players on all 28 NFL teams. The NFLPA is a member of the Federation of Professional Athletes, which I am proud to say is affiliated with the AFL-CIO. I also serve on the Executive Council of the AFL-CIO.

On behalf of the 1600 professional football players in the NFL whom the Players Association represents, I welcome your invitation to appear today to discuss the very important issue of steroid abuse in sports and the response of the athletic community, in particuar the NFLPA.

At the outset, let me say we fully endorse provisions of the Anti-Drug Abuse Act of 1988 (P.L. 100-690) calling for a study and report on anabolic steroid use among high school and college students and other adults. Mr. Chairman, as you know the study

is to include estimates of licit and illicit use, the amount and type of production of such substances, both domestically and internationally, as well as a complete summary of the best available medical literature on the health consequences resulting from anabolic steroid use. The report, to be submitted to Congress by the Comptroller General by June 1, 1989, will be extremely valuable in formulating appropriate and effective programs. We look forward to its submission.

We also subscribe to the Demand Reduction Activities spelled out in Public Law 100-690 which have been tenets of a the NFLPA approach. They include: education; prevention; treatment; research; and rehabilitation.

First, let me address drug testing in the work place and the procedures we established in the NFL through collective bargaining to treat, care for, and eliminate chemical dependency problems of players.

I want to stress that the NFL Players Association and its members recognize the vital need to curb chemical substance abuse and misuse. We are keenly aware of the devastating costs the drug problem poses today in terms of human tragedy (to individuals and their families), as well as the mounting financial costs to society in law enforcement, health care, injuries, and death. We have worked with the Department of Justice and the Drug Enforcement Administration for several years to develop an educational program addressed at stopping chemical dependency. Our members participate in Demand Reduction and the "Sports Drug Awareness Program" developed through the Drug Enforcement Administration. Also we have developed "Super Teams" in which NFLPA members participate in community service organizations around the country working in various activities directed at controlling drug abuse and misuse.

Mr. Chairman, we also fully recognize that the public attention bestowed on us as professional athletes affords us unique opportunities to communicate with youth and we are determined to use that special public status in responsible ways.

As employees engaged in a physically demanding occupation, involving significant risks of crippling physical injury, and requiring strenuous physical conditioning and fitness, we are acutely aware of the increased dangers that chemical substance abuse presents. For these and other reasons, in 1982 we established a collectively-bargained procedure to detect, educate, and treat players determined to be chemically dependent. The cornerstone of that agreement was confidentiality. I am proud to say that since 1982 our union has repeatedly sought to improve educational, rehabilitation, and after-care aspects of our collectively-bargained drug program.

Anabolic steroid abuse is an institutional phenomenon in football. By that, I mean, the impetus for steroid use most often has come from the sport's management, i.e., coaches, owners, and others who urge "bigger and stronger is better." These institutional influences have led some athletes into the notion that such substances will help them. But, increasingly, players have become aware that there are serious medical dangers involved in the use of these substances, including, high blood pressure, heart attack and stroke, and as you have noted, Mr. Chairman, in your remarks in the Congressional Record, stunted growth in adolecents, and even death. The Commissioner has not shared with us data on the prevalence of steroid abuse in the NFL today. His public estimates have been that over the past two years approximately six percent of active players may have used steroids. We believe our educational efforts, however, are

working and we pledge to continue to assist players in learning of the dangers that such substance abuse present.

We applaud your efforts, Mr. Chairman, to strengthen federal law with respect to prohibiting the use of the mails to sell or solicit the sale of anabolic steroids, and support generally the purposes of your bill, S.466.

Through collective bargaining efforts in the past, the program developed in the NFL was to provide the following elements:

. detection of drug use by players;

. education of players determined to be chemically dependent;

. treatment of players determined to be chemically dependent;

. a central organization (unconnected with management or the union) to evaluate existing

chemical dependency facilities used by teams; to provide education programs, to conduct reasonable-cause testing of players suspected of being chemically dependent; and to process medical bills for players treated so as to protect confidentiality of medical reports and the names of players.

The program comprised urinalysis testing of players, and their treatment, rehabilitation, and education concerning chemical dependency. To be successful, this program had to depend on mutual trust and cooperation. The collective bargaining process is a critical means of developing and securing such trust and cooperation under which such a program can be effective.

Our goal in the NFL Players Association has been to educate, test, treat, and rehabilitate. The fact that

significant publicity surrounds professional athletics often leads management to try to impose a quick cure at the expense of individual rights or in disregard of the collective bargaining agreement. We have taken necessary legal steps to assure that the terms and conditions of the collective bargaining agreement are observed and enforced. In 1986, two arbitratrion decisions sustained our collective bargaining agreement against such efforts by the Commissioner, who attempted to impose unscheduled drug tests without reasonable cause on all players in the NFL.

Our agreement provided for urinalysis testing at the pre-season physical and upon "reasonable cause" thereafter at the direction of the team physican. Our agreement also prohibited random testing. The so-calied "augumented" program imposed by Commissioner Rozelle in 1986 directly conflicted with the program agreed to in collective bargaining. A successful program must be based on cooperation, not management first.

After lengthy hearings the arbitrators carefully deliberated the issues and sustained our view that the collective bargaining agreement precluded this additional testing.

As we approach the serious problem of drug abuse and dependency in our society, we must recognize there are no overnight solutions. We need programs that include education, treatment, rehabilitation, and confidentiality. In particular, confidentiality assures that individual interests will be protected. It has not been properly observed by NFL management.

We also must be mindful that our form of government is based on certain fundamental values. We are a free society where government does not intrude in our lives without just cause; where we are presumed innocent until proved guilty; and where we are protected by law from being forced to testify against ourselves. We need to encourage cooperation with law enforcement authorities to help identify and convict drug dealers. We need

to improve counselling, and after care programs, and to strengthen our efforts to dissuade those who have not turned to drugs from becoming dependent on them. Government, labor, and management should bear all of these values and goals in mind when addressing the scourge of drug abuse. Throughout, we must remain sensitive to individual concerns of privacy, the accuracy of drug testing, and the legality of the procedures adopted.

Mr. Chairman, our 1989 collective bargaining priorities remain an improved drug and alcohol abuse prevention program. We do not agree with the owners that additional random testing is the answer. We shall continue to press for our proposals.

In professional football, we believe that the best approach is through mutually developed programs that discourage drug use, helps those with drug abuse problems, and protects the rights of players. The comprehensive program we suggest includes an in-depth educational program, quality rehabilitation and

after-care, stiffer penalties imposed by a neutral body for repeated rules violations, a $50,000 fine for any member of management who is guilty of a breach of confidentiality, and a career and financial counselling plan to help all players.

Drug trafficking and drug abuse are nationwide calamities, far exceeding the capabilities of State and local governments to curb. Federal action is essential to interdict drug traffic and to assist the development of effective education, treatment and rehabilitation programs.

Based on our experience in the NFL, I believe any serious effort to curb drug abuse, at the minimum, must include:

- improved education programs to stop those who have not used drugs from starting;
- improved treatment programs for those with dependency problems aimed at helping rather than punishing. One example would be a college athlete

who could benefit from such treatment, but may fear the loss of a scholarship by entering a treatment program. In other words, those with dependency problems should be encouraged to seek help.

- encouragement to cooperate with Federal, state and local law enforcement agencies to identify and help convict drug dealers. Too often, sanctions are imposed by organized sports on those who come forward and cooperate and this can have a chilling effect on law enforcement efforts.

The NFLPA believes in an individual approach that recognizes human failings; an approach that is fair and that offers real rehabilitation, but which also is strict and which imposes consistent punishment for the repeat offender. Such punishment in appropriate cases could include suspension from the

sport entirely, so long as due process is observed and the sanction is imposed by a neutral.

But, we believe in confidentiality and mutual trust -- not skapegoats or headlines for the sake of "business as usual." Men of good will should be able to develop a cooperative program in an atmosphere of mutual respect, not one in which participation in union activities becomes the "hidden agenda" for intimidation and punishment. It is time for the NFL to exhibit respect for its employees.

We do not support publicity efforts that sacrifice an individual player's career for a management campaign to appear "concerned." We have worked in the past and will continue to strive in the future for a fair and effective substance abuse detection and rehabilitation program.

Of paramount importance in any effort, is the development of trust and the assurance of confidentiality. Our

experience in the NFL teaches that drug abuse is too serious to be treated as a public relations issue. It requires good will and a serious commitment to provide realistic treatment and rehabilitation programs to deal with the problem.

This concludes my written statement. I will be pleased to answer the Committee's questions. Thank you.

STATEMENT OF MR. BILL FRALIC

Mr. FRALIC. As a player in the National Football League, I welcome this opportunity to address the issue of anabolic steroids before such an illustrious and respected group as the Senate Committee on the Judiciary.

I thank you for this chance, and I hope your investigation will lead to ridding athletics in our society of steroids.

I believe steroid use is rampant among the NFL, and that includes my own team. It is rampant in colleges, and it is rampant in high schools. Everybody is blind to it because they choose to ignore what is happening in the world of steroids. It is time to stop ignoring the problem and to open the eyes of the naive.

Steroid use in football represents a vicious cycle. I know there are many players in high school, college and the NFL who want to stop using steroids but they cannot or will not because they do not believe they can be competitive without them.

The emphasis on winning at all costs is becoming epidemic. High school players think they need steroids to win a college scholarship. College players do steroids to they can improve their chances at playing in the pros and getting a lucrative contract. NFL players use steroids to keep their jobs because there are few guaranteed contracts in our league. The system rewards you for being a good football player no matter what the means are to the end.

Obviously, coaches at every level turn their back to the steroid situation. High school coaches are trying to build an impressive record for their resume or to build their status within a community. College coaches face tremendous pressure to win. Pro coaches are judged only on one basis, their win-loss record. The cycle keeps repeating itself, and a monster problem is growing.

NFL owners cannot grasp this problem. They have not been living in the middle of the steroid madness. They cannot see their friends affected by it.

The recent NFL draft is a great example of how teams will look the other way when it comes to steroids. Two players picked in the first round admitted they had tested positive for anabolic steroids. Both teams bought the standard explanation. The player in question said that a doctor had prescribed the steroids to help their injuries heal. That satisfied everybody.

I have spoken with NFL team physicians. Their position is unanimous. There is no reason a doctor should prescribe steroids to a player. None. Injuries are not an excuse to prescribe or use steroids.

In our league, random testing is the only way to stop the steroid madness. Though Commissioner Rozelle has taken important steps in deterring steroid use, it is not enough. Players know they will test just once, at the start of training camp. This allows him to do steroids all off-season, and then about one and a half months, or whatever the steroid is, it varies in time, before training camp testing in mid-July, he can get off them. Once he tests, he can restart using steroids, and by the time the season opens in September, he is all bulked up.

There are players who justify steroid use. They have a doctor monitor them and believe they are protected because they are

being responsible in their use of steroids. There is no responsible use of steroids in football.

I briefly experimented with steroids as a sophomore and junior in college. Part of the problem was ego. I was as dedicated as other people in the weight room, but I was not getting the same results. My conscience would not allow me to continue using steroids. I wanted to know in my mind that whatever Bill Fralic accomplished on the football field, Bill Fralic did it because of his natural ability and not as the result of a foreign product such as anabolic steroids.

I have been named to All-Pro teams and elected to the Pro Bowel three straight years. I want people to know I did it as a result of what God and my parents gave me, and because of my own dedication to doing something with those gifts. My success is not the result of steroids.

I want the game rid of anabolic steroids, and I do not care how it is done. I am willing to test every day. I once polled out players about random testing, and 80 percent were in favor of random testing without a question. The other 20 percent were more concerned with how the testing would be done, alluding to the fact of management abusing and so forth. But I think what that says is we have no problem with that as a whole.

I find this significant because public reception is just the opposite. Fans believe players are fighting random testing. I am certain players favor random testing so they can get off steroids. But unless they can be certain that the guy across from them is off them, then there is no hope.

Some people brag that they have bulked up without steroids, and they will even give you a grocery list of foods they eat to support their claim. I submit that this is a farce. This player in fact may be consuming 10 to 12,000 calories a day, but I would bet everything I had that this consumption is supplementary to his use of steroids and growth hormones.

Growth hormones are a frightening development. The synthetic development of growth hormones has dropped prices to very affordable levels. It is another avenue players will take to beat the system.

What is means is the NFL becomes something of a freak show. Eventually, there will be disgrace in the name, much like we have seen disgrace in the Olympics.

And what happens if the game ever became clean of steroids? You might see 300-pound players become 270-pounds players. You might see 240-pound players shrink to 220 or 215, and so forth.

But the game will not change. If anything, the game will be better because there will be less injuries.

Again, I personally do not care how we rid the game of steroids. I just want it done, and we need help.

Thank you.

[The statement of Mr. Fralic follows:]

May 8, 1989

Statement by Bill Fralic, Atlanta Falcons

As a player in the National Football League, I welcome this opportunity to address the issue of steroids before such an illustrious and respected group as the Senate Committee on the Judiciary. I thank you for this chance, and I hope your investigation will lead to ridding athletics and our society of steroids.*

I believe steroid use is rampant among the NFL, and that includes my own team. It is rampant in colleges, and it is rampant in high schools. Everybody is blind to it because they choose to ignore what is happening in the world of steroids. It's time to stop ignoring the problem, and to open the eyes of the naive.

Steroid use in football represents a vicious cycle. I know there are many players in high school, college and the NFL who want to stop using steroids but they can't or won't because they don't believe they can be competitive without them.

The emphasis of winning-at-all-costs is becoming an epidemic. High school players think they need steroids to win a college scholarship. College players do steroids so they can improve their chances at playing in the pros and getting a lucrative contract. NFL players use steroids to keep their jobs because there are few guaranteed contracts in our league. The system rewards you for being a good football player, no matter what the means are to the end.

Obviously, coaches at every level turn their back to the steroids situation. High school coaches are trying to build an impressive record for their resume or to build their status within a community; college coaches face tremendous pressure to win; pro coaches are judged on only one basis, their win-loss records. The cycle keeps repeating itself and a monster problem is growing.

* Throughout my statement, the term "steroid" refers to anabolic-androgenic steroids.

NFL owners can't grasp this problem. They haven't been living in the middle of the steroid madness. They can't see their friends affected by it.

The recent NFL draft is a great example of how teams will look the other way when it comes to steroids. Two players picked in the first round admitted they tested positive for steroids. Both teams bought the standard explanation: The players in question said that a doctor had prescribed the steroids to help their injuries heal. That satisifed everybody.

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In our league, random testing is the only way to stop the steroid madness. Though Commissioner Rozelle has taken important steps in deterring steroid use, it is not enough. Players know they will test just once at the start of training camp. This allows him to do steroids all off-season, and then about one-and-a-half months before the training camp test in mid-July, he can get off them. Once he tests, he can re-start using steroids and by the time the season opens in September, he's all bulked up.

There are players who justify steroid use. They have a doctor monitor them and believe they are ''protected'' because they're being responsible in their use of steroids. There is no responsible use of steroids in football.

I briefly experimented with steroids as a sophomore and junior in college. Part of the problem was ego. I was as dedicated as other people in the weight room, but I wasn't getting the same results. But my consience would not allow me to continue using steroids. I wanted to know in my mind that whatever Bill Fralic accomplished on the football field, Bill Fralic did it because of his natural ability and not as the result of foreign product such as steroids.

I've been named to All-Pro teams and elected to the Pro Bowl three straight years. I want people to know I did it as the result of what God and my parents gave me, and because of my own

dedication to doing something with those gifts. My success is not the result of steroids.

I want the game rid of steroids, and I don't care how it's done. I'm willing to test every day. I once polled our players about random testing and 80 percent were in favor of random testing. The other 20 percent were more concerned with how the testing would be done. I find this significant because public perception is just the opposite. Fans believe players are fighting random testing. I'm certain players favor random testing so they can get off steroids. But unless they can be certain that the guy across from them is off steroids, then there is no hope.

Some people brag that they have bulked up without steroids, and they'll even give you a grocery list of foods they eat to support their claim. I submit that this is a farce. This player in fact may be consuming 10,000 to 12,000 calories a day, but I would bet everything I had that this consumption is supplementary to his use of steroids and growth homones.

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Again, I personally don't care how we rid the game and society of steroids. I just want it done. We need help.

Thank you,

Bill Fralic, Atlanta Falcons

The CHAIRMAN. You are not only one heck of a ball player. You are as articulate as can be. That is a great statement.

Thank you.

Mr. FRALIC. I would like to thank the reporter from Atlanta for helping me with that, Ms. Mortenson. [Laughter.] [Applause.]

The CHAIRMAN. I can see this attribution favor has caught on. [Laughter.]

Mr. FRALIC. But I acknowledged her.

The CHAIRMAN. Now, you are in deep trouble.

Yes, fire away. By the way, I acknowledged too. They just did not catch it all the time. [Laughter.]

STATEMENT OF MR. STEVE COURSON

Mr. COURSON. First of all, Senator Biden, I would like to thank you for inviting me here.

I think there are some scientific points that need to be made here as far as testing. And I think there are a lot of other points that need to be made. And I submitted a statement to you, and I do not want to go through it, it is rather lengthy.

The CHAIRMAN. The entire statement will be placed in the record though.

Mr. COURSON. Right. Thank you.

First of all, I think to understand steroids in sports, you have to understand their introduction to them in sports. In other words, steroids in sports, is there a solution? With present testing capabilities I think the Olympics is a great historic example for this. The mass spectrometer and gas chromatograph, which is the state of the arts in testing is not efficient enough at this point scientifically to clean up the game on its own.

One illusion I would like too is the growth hormone, as Bill talked about. Presently today, you cannot test for it. With an inefficient testing methodology, I think your hope of using testing as a deterrent is rather ludicrous.

I think the biggest thing we have to understand here is the overriding concern in this issue should be the health of the athlete, the education of the youth in society, and working together on this problem. In other words, this is not something we are going to solve by pulling at different ends. It has not been solved in Olympic sports that way.

In football during the 1960's, a theoretical change occurred in the philosophy with regard to weight training in football. In previous years, football coaches generally discouraged weight training for fear it would make players muscle bound. As years passed, and teams used weight training more and more, you began seeing strength coaches in elaborate weight facilities on college campuses and at pro training centers.

Every program was looking for an edge. Naturally, the football players went to the weight lifters for advice on training and found out that there was a secret within a secret, anabolic steroids.

Dr. John Ziegler, former physician for the U.S. Weight Lifting Team in competition with the Soviet weight lifters back in the 1950's, noticed their doctors were using testosterone in their lifters. All anabolic steroids are analyzed for testosterone.

Being a patriot, Dr. Ziegler worked with the Ciba Pharmaceutical Company and created Dianabol, or it is known as methandienone. This is the first American anabolic steroid back in 1958. He was afraid that the Soviets were going to use strength events in the Olympics with a bargaining chip in world politics.

Dianabol and methandienone he hoped would give American athletes parity with the Eastern Bloc athletes. Thus, the entry in 1958 of anabolic steroids in American sports.

It was not long afterward when this chemical started spreading throughout the various athletic institutions and weight rooms in America. In an article in Sports Illustrated magazine during the 1987 strike year, former San Diego Charger offensive lineman, Ron Mix, stated that the first strength coach in pro football, Alvin Roy, was giving players Dianabol, an oral anabolic steroid. This was done, according to Mix, without an explanation of the total ramifications on what was being taken. This was in 1963.

Here we have the beginning of an escalating chemical war. After 25 years, there are new drugs which created a dilemma, not only for the sports world, but for society. Most sports medicine researchers all agree that steroid use in strength sports is epidemic.

Now, I can go through past NFL policy. I can go through the ramifications of the mass spectrometer and the gas chromatograph. That is all in my statement.

But there is one thing that I would like to say while I am here. I think it is really important.

The final question that you sent me in what more amateur and professional sports organizations, Government, the media and other groups should do to decrease the steroid use? In other words, we can all fight here, and we can all say, well, we can test this, do this. But the bottom line is if we are going to fight each other, we are not going to get anything done.

This country supports the largest scientific establishment in the history of mankind. New discoveries are constantly being made, and many of these discoveries have important political and social overtones.

In the near future, we can expect more crises on the pattern of Andromeda. Thus, I believe it is useful for the public to be made aware of the scientific crises, of the way the scientific crises arise and are dealt with. That is from Michael Crichton in The Andromeda Strain, 1969.

Education is the greatest key. However, we, as Americans, need to analyze our priorities. What we teach our young as far as winning and its relative importance is paramount. This is a responsibility of parenting and of coaching. Also, this must be programmed into the very young.In retrospect, this is something that must be addressed internationally.

In order for the education to be complete, there must be more definitive research conducted in both anabolic and adrenal steroids and in genetic hormonal research.

Perhaps in cooperation with the National Institutes of Health, a National Research Center could be funded so that all mankind can benefit from better knowledge and understanding of the effects of these drugs.

There are medical implications in where therapeutic uses of these drugs can be a useful tool in mankind and modern medicine.

I believe with the future implications of these chemicals, that this is a battle scientifically and morally that man cannot afford to lose.

The Soviet Union has conducted research in this area since at least the 1950's. Perhaps a glasnost type of information exchange is feasible in increasing our knowledge in this area.

We also have a certain degree of expertise in this area within our own country. Some of these experts could form a board of consultants to facilitate greater advances in research.

Certain implications of the science are complicated. That is why cooperation is so sorely needed, so sorely needed, so this dilemma can be properly addressed.

Hopefully, the perfect testing methodology will be found, and God's grace will grant purity in sports again.

What I have witnessed in my career was, experience with steroids, and the research I have done in the past 3½ years, I personally do not believe that present policies will solve the problem. Yet, I pray cooperation between management, coaching, sports science, athletes, along with education, will join hands to create a safer, and hopefully a more enjoyable, era of modern sports.

From Douglas MacArthur's speech at the end of World War II, he commented on entering the nuclear age that modern technology left us on the doorstep of Armageddon. He addressed this immense problem with the remark it must be of the spirit if we are to save the flesh.

That is all I have to say.

[Mr. Courson's statement follows:]

5115 Sutton Place Extension
Wexford, Pennsylvania 15090-9702
May 6, 1989

United States Senate
Committee on the Judiciary
Washington, DC 20510-6275

Members of the Committee:

First of all, I would like to establish three major points:

1. That strength sports cannot be played at present levels without anabolic steroids and pain killers. The time for the sports world to self-indulge itself in imagery is over.
2. That present testing capabilities are not capable of cleaning up sports. That only cooperation through sports administration, coaching, athletes and medical science will solve this problem.
3. That the over-riding concern should be the health of the athlete and the education of the youth and society. It is rather redundant to make athletes "sacrificial lambs" for a 30-year problem. Have not various sports organizations benefitted indirectly in an economic sense with this drug "problem"?

INTRODUCTION

Steroids in sports: is there a solution? To fully understand this problem it is necessary to understand the evolution of this dilemma in strength sports. Also to analyze this dilemma in football is comparable to observing the slow, steady escalation of a "chemical war". To understand any drug problem you must deal with its symptoms. Steroid use is inherent in strength training, power lifting and body building. Basic strength training is used in various sports.

In football during the 1960's a theoretical change occurred in the philosophy with regard to weight training in football. In previous years football coaches generally discouraged weight training for fear it would make players "muscle bound". As years passed and teams used weight training more and more, you began seeing strength coaches and elaborate weight facilities in college campuses and at pro training centers. Every program was looking for an edge.

Naturally the football players went to the weight lifters for advice on training and found there was a secret within a secret, anabolic steroids!

Dr. John Ziegler, former physician for the United States Weight Lifting Team in competition with the Soviet weight lifters in the 1950's, noticed that their doctors were using testosterone in their lifters. All anabolic steroids are analogs of testosterone. Being a "patriot" Dr. Ziegler worked with the Ciba Pharmceutical company and created Dianabol. He was afraid that the Soviets were going to use the strength events in the Olympics as a "bargaining chip" in world politics. Dianabol or methandrostenolone he hoped would give American athletes parity with Eastern Bloc athletes. Thus the entry in 1958 of anabolic steroids in American sports. It was not long afterwards when this chemical started spreading throughout the various athletic institutions and weight rooms in America.

In an article in Sports Illustrated magazine during the 1987 strike year former San Diego Charger offensive lineman Ron Mix stated that the first strength coach in pro football, Alvin Roy, was giving the players Dianabol, an oral anabolic steroid. This was done, according to Mix, without an explanation of the total ramifications on what was being taken. This was in 1963.

Here we have the beginning of an escalating chemical war. After 25 years there are new drugs which created a dilemma for not only the sports world but for society. Most sports medicine researchers all agree that steroid use in strength sports is epidemic.

"YOUR ASSESSMENT OF THE EXTENT OF STEROID ABUSE AMONG AMATEUR AND PROFESSIONAL ATHLETES, PARTICULARLY FOOTBALL PLAYERS"

I would estimate conservatively 50% of the line of scrimmage positions have augmented or still periodically augment their training programs with steroids. Of the linebackers, tight ends or full back positions it is less, and in the skill-speed positions it is less, yet being done as evident in sprinters' usage in track and field. Because talent scouts place such high premiums on size, weight, speed in the 40-yard dash and bench press strength in their appraisals of prospective NFL talent, this indirectly creates a dilemma for the college athlete trying to maintain parity and to impress scouts with physical prowess to land a big NFL contract through being a high draft pick. Your draft status relates directly to your wage earning status. In other words, if you are 6'6", 320 pounds, bench press 600+ pounds, run a 4.6 second 40-yard dash and play skillfully, you are rewarded thusly with a high draft status and big money. These numbers are not attainable by athletes naturally without sport-enhancer

augmentation by any athlete who I know. This is just a hypothetical example of the problem. The more physically dynamic a package you are increases your value to the NFL. NFL football and Olympic sport cannot be played at present levels without steroids. This is the cruel but serious reality of the modern sports world.

"YOUR PERSONAL EXPERIENCE WITH STEROIDS, BOTH IN COLLEGE AND IN THE NFL"

My first introduction to anabolic steroids was in the summer of 1974 after my freshman year in college. Recruited as a linebacker, I was switched to defensive tackle in my freshman year. Weighing 230 pounds I wanted to weigh 250 - 260 pounds; in 1974 this was large for a college lineman. I went to the team physician, and he prescribed 5mg of Dianabol for 30 days; this was charged to the University. In 1974 steroids were not an issue. This augmentation helped increase my training productivity and intensity. I was lifting weights and running like a man possessed. My size, speed, intensity and strength increased dramatically. This is what I and my coaches wanted. I did not use chemical augmentation again until just before reporting to Steeler training camp in 1977. It helped as I was dynamically improved speed-, strength- and size-wise.

In my early years in the NFL my chemical escalation did not increase until I started competing in the NFL Strongest Man Competitions shown by ESPN and sponsored by Diversified Products in 1981 - 1982. These were my first "stacked" steroid "cycles" in augmentation. "Stacked" means more than one steroid, and "cycle" is a duration of usage and dosage. At this time in my career my attitude had changed from the mindset of a "crusader" to a "mercenary".

In the spring of 1985 I experimented for the first time in dosages that were in the "abuse" realm. I had at this point never experienced anything but positives and essentially all dosage levels are experimentally relative. This level, however, was greater in scope than anything I had ever tried. At a routine physical at Tampa Bay I discovered that I had atrial fibrillation in my heart. This was a standard NFL pre-season physical.

Temporarily retiring I did an exclusive May 13, 1985 article with Sports Illustrated magazine entitled "Steroids: A Problem of Huge Dimensions". This article dealt with steroids in the NFL. Other players supported my statements indirectly in the article.

Playing the following year steroid-free, I was phased out at the end of the 1985 season losing my starting job. Trying to be traded I was waived and could not get a tryout with other clubs. Not pressing the issue, I retired. Personally, steroids were hard to quit being a strength athlete until the point

where mentally I did not care about being competitive.

"YOUR ASSESSMENT OF WHETHER THE NFL'S CURRENT POLICY ON STEROID USE BY PLAYERS IS ADEQUATE TO DEAL WITH THE PROBLEM"

To understand current policy you must first understand the effects of past policy. The Olympics have been testing and have been aware of the steroid dilemma since the Montreal Games of 1976. Steroids have been spreading in the NFL since 1963.

On December 11, 1983 Pete Rozelle sent a communique to all NFL clubs approximately two months after many athletes including two Americans were busted for testing positive for steroids in the Pan Am Games. Introduced to the athletic world were the mass spectromter and gas chromatograph developed by West German scientist Manfred Donike and Howlett Packard. This was the newest state-of-the-art in drug testing and still is. In Rozelle's memorandum that if steroids were used "to achieve increased body bulk, strength, stamina or similar physical and athletic attributes...appropriate disciplinary action will be taken against involved players or club personnel." This was announced to all players, coaches, trainers and team physicians. Would it appear from this quote that Commissioner Pete Rozelle was worried that some of his teams were administering anabolic steroics to athletes? Drug testing and suspensions were part of Olympic policy since 1976. No policy in football with drug usage evident as early as 1963. Then in 1983 a statement from the Commissioner warning disciplinary action without stating penalties; in other words, a weak policy.

In a 1985 Sports Illustrated article, "Steroids: A Problem of Huge Dimensions," Rozelle stated, "If a player is attempting to enhance his performance on the field by steroids, it's wrong." He added, "I feel confident that steroids are not being dispensed to any heavy degree by the clubs. But you can't stop someone from getting them on the outside. We tell them first, it's debatable whether or not it improves your performance and again we tell them the potential side effects. I don't think steroid use is that big...with clubs not dispensing steroids and the athletes not overly prone to buy them if they have to pay for it." First of all, what advantage is it to Rozelle to admit that the NFL has a sports-enhancer chemical problem? At this point there was still no testing with a set procedure or penalties. If Rozelle was unaware of the problem, then he was negligent as being Commissioner of the NFL. Is it possible that he denied the extent of the problem in an effort to protect image in a cover up? Is not the NFL in the business to sell violence? Do not these chemicals enhance the sensationalism of their product?

Finally, in 1987 testing in training camp where 6% of the players tested positive. No disciplinary action taken and no education attempts.

In 1988 Rozelle's office stated that "Each instance in which a second positive test for anabolic steroids is confirmed will be handled on a case-by-case basis. Involved players will be subject to appropriate discipline by the Commissioner." Then Rozelle announced the same suspension policy for anabolic steroids as that for illegal drugs. Yet pain killers such as Xylocaine, cortisone and novocaine are still administered by team physicians before the "big" games. What we have is a ergogenic versus restorative drug dilemma.

Now we have as of the last owners meeting the latest policy change, a penalty stiffer than those for illegal drugs. First offense - 30-day suspension, second offense - 1-year suspension. Testing is not sufficient, it hasn't worked in the Olympics. Not to legitimize steroids, but with beatable testing, what are alternatives?

The steroid dilemma in modern sports and society is very complicated yet not unsolvable. The probabilities of making sports absolutely pure again is going to be a difficult task. It will require cooperation from all three levels of sports --- management, coaching and athletes --- in equal participation and responsibility.

First let's examine present testing capabilities. Today the latest technology of "dope detection" is the mass spectrometer and gas chromatograph invented by West German scientist Manfred Donike with Hewlett Packard. This is what is used presently in labs to test in the NFL and in the Olympics. It is highly sophisticated but cannot detect the human growth hormone, a powerful anabolic agent. Certain water-based agents cannot be detected if eliminated from one's system weeks before testing. The International Olympic Committee put a ceiling on testosterone because the levels may vary three-fold in men. It is possible if monitoring levels that an athlete could use low levels of testosterone, stay under the limit and test clean. Masking drugs an small rearrangements of the steroid molecular structure can confuse testing. With beatable testing, the pressure to win and perform, the natural competitiveness between athletes and with the extent of the dilemma, still present are health risks. Until a fool-proof testing methodology is found, I believe steroids will always be a problem in sports. The IOC, since they began steroid testing in 1976 and their history with the problem, lends credence to this. The IOC and the NFL are trying to address the problem, but present testing is only a limited deterrent. Until the time of the perfect technology athletes choosing the steroid pathway should have the opportunity to be monitored instead of facing penalties from an archaic system of

testing that serves more as a public relations ploy than a problem-solver or deterrent. Also, penalizing just the athlete for something in which the world of sports science, coaching and management all showed a certain irresponsibility, is not fair. Not to legitimize steroids, but present testing, chastising and penalties with present testing capabilities do not solve the problem. I think the public would be amazed at all of the athletic performances glorified by them that were indeed steroid enhanced. Education is the major key. I know that sports management is in a bind on what to do with this problem; here is a possible solution. It is not a solve-all but a possible solution as perhaps a stopgap until a fool-proof methodology is found.

An athlete being monitored through periodic blood tests, electrocardiograms and blood pressure tests could detect tell-tale signs of ill health which I believe would be the greatest deterrent against athletes' continued use of steroids. Especially if they realized through the doctor or panel of doctors that certain functions were suspect before ill health listed another casualty. Also steroid use under a doctor's supervision is perfectly legal and keeps athletes away from black market drugs. All of this could be done confidentially with athletes wishing to risk consequences signing releases to various sports organizations to avoid legal entanglements. In this way, the cat and mouse game would be avoided and the dilemma would be under the watchful eye of medical science. This could also assist athletes in policing their sports with the releases of names of athletes wishing to use steroids being known to the athletes only. A strict code of athlete-to-athlete confidentiality with breached confidentiality resulting in penalties or expulsion from sports being imposed. No one is forced to compete chemically, and a better athlete-to-athlete brotherhood could develop. Also, the number of athletes choosing chemicals or signing releases would made public. In that way there would be pressure on athletes to police the integrity of their respective sports. Numbers of athletes augmenting their performances with drugs being publicly known in individual sports would show the character of the sport. Of course, certain sports would be more prone to chemicals than others. Also, the amount of public pressure would show whether the public really cares. In this way, a choice under medical guidance would replace dictatorial PR imagery producing "sacrificial lambs". The responsibility would be out of management's and coaches' hands and under the watchful eyes of medical science with athletes policing and controlling the integrity of their own futures.

"WHETHER THE NATIONAL FOOTBALL LEAGUE, COACHES AND TEAM PHYSICIANS HAVE DONE ENOUGH TO ADDRESS THE PROBLEM OF STEROID USE BY NFL PLAYERS, AND WHAT MORE THEY CAN DO TO DECREASE STEROID USE IN THE NFL"

Up until recently coaches and team physicians have done very little to address the situation at all. Because of past lack of efficient policy, the coaches and team physicians have been placed in a dilemma. Generally, college coaches who

1. violate recruiting criteria,
2. preside over an internal steroid scandal, or
3. have an off-field dilemma

usually face minimal problems, but they do face job security if they lose. Violence in sports is a tell-tale sign evidencing a decline in society, if we observe history --- especially the Romans. What degree of injury do we deem unavoidable and therefore accept? I feel for coaches and physicians in their predicament. With pain and violence, this is why rampant drug usage.

From "Pumping Drugs" in The Chicago Tribune magazine (January 22, 1989), Penn State's Dr. Yesalis states, "I think you can come to some conclusions in a roundabout way. If you look at the average size of NFL linemen and college linemen 20 years ago and then look at them today, you see a 50 - 60 pound increase in size with a concomitant decrease in body fat. And I'll tell you, as a scientist, we as a species have not evolved that fast." Dr. Yesalis also conducted the study analyzing the steroid problem afflicting the nation's high schools.

Coaches, because of the vulnerability of their jobs in a sports world where winning is everything, are put in a tremendous dilemma. Also from "Pumping Drugs" (the Chicago Tribune, January 22, 1989), the NCAA's Uryasz states, "I don't put the blame on coaches entirely. We need to educate them on what to look for." Uryasz adds, "But I also think a lot of them are turning their backs to the problem. That gets back to the competitive advantage thing. It's a tough problem, but I think it's pretty hard for them not to know. You can't always pick out those using anabolic steroids, but there are some very real indicators that a player is using them."

Physicians suffer from a flow of conflicting information as far as anabolic steroids are concerned. The American College of Sports Medicine lost all credibility with athletes when it stated that anabolic steroids did not enhance performance. Athletes had found out that they did enhance performance. So why listen when the warnings come out about side effects? Because of confusion in the

medical community, there existed an information and credibility gap.

Finally, in order to address the steroid problem in the NCAA and pro football, you must address the entire drug problem. For years team physicians have been using injectable pain killers to "numb" injured parts. When a player cannot feel pain, he has no indication of what further injury is being inflicted. This is the "restorative" drug (pain killers, muscle relaxers, etc.) versus the "ergogenic" drug (anabolic steroids, amphetamies, caffeine, etc.) dilemma. How many former football players are walking around with messed up joints who suffer because of former pain killer use? How many walking or not-walking wounded are there? What about medical help for those who have given their health to the game? Are football players throw-away items? Are we going to let the next generation of sports enhancers sneak into sports?

"WHAT MORE AMATEUR AND PROFESSIONAL SPORTS ORGANIZATIONS, GOVERNMENT, THE MEDIA AND OTHER GROUPS SHOULD DO TO DECREASE STEROID USE"

"This country supports the largest scientific establishment in the history of mankind. New discoveries are constantly being made, and many of these discoveries have important political and social overtones. In the near future we can expect more crises on the pattern of Andromeda. Thus, I believe it is useful for the public to be made aware of the way scientific crises arise and are dealt with," writes Michael Crichton in The Andromeda Strain, 1969.

Education is the greatest key. However, we as Americans need to analyze our priorities. What we teach our young as far as winning and its relative importance is paramount. This is a responsibility of parenting and of coaching. Also, this must programmed into the very young. In retrospect, this is something that must addressed internationally. In order for education to be complete, there must be more definitive research conducted in both anabolic and adrenal steroids and in genetic/hormonal research. Perhaps in cooperation with the National Institute of Health a national research center could be funded so that all mankind can benefit from better knowledge and understanding of the effects of these drugs. There are medical implications where in therapeutic uses of these drugs can be a useful tool to mankind in modern medicine. I believe that with future implications of these chemicals that this is a battle scientifically and morally that man cannot afford to lose.

The Soviet Union has conducted research in this area since at least the 1950's. Perhaps a Glasnost-type of information exchange is feasible in increasing our own knowledge in this area. We have also a certain degree of expertise in this area within our own country. Some of these experts could form

a board of consultants to facilitate greater advances in research.

> "As our minds have probed more and more curiously into the speed-time continuum in which the drama of evolution has been framed they have discovered one paradoxical aspect after another behind the plausible face of normal behavior...in the record of the rocks it has been the gigantic individuals who appeared at the end of each chapter."
>
> H.G. Wells
> Mind at the End of Its Tether, 1946

Certain implications of this science are complicated, that is why cooperation is sorely need so this dilemma can be properly addressed.

Hopefully the perfect testing methodology will be found, and God's grace will grant purity in sports again. After what I have witnessed career-wise, experienced with steroids and the research I have done for the past 3½ years I personally don't believe that present policies will solve the problem. Yet I pray cooperation between management, coaching, sports science and athletes, along with education, will join hands to create a safer and hopefully more enjoyable era of modern sports.

From Douglas MacArthur's speech at the end of World War II, he commented on entering the nuclear age that modern technology left us on the doorstep of Armageddon. He also addressed this immense problem with the remark, "It must be of the spirit if we are to save the flesh."

Sincerely.

Steve Courson

SPC/lmp

The CHAIRMAN. You said it well. Thank you.

Let me begin with you, Mr. Courson. You were a great college athlete at South Carolina, and considered by many a great NFL player.

Why did you feel the need to follow the advice to take steroids when you were at South Carolina? And I might add, for the record, they were not illegal at the time to take them so you did not commit a criminal offense by doing so.

But why did you take them—as good as you were?

Mr. COURSON. I feel that every athlete pursues a dream and sometimes that dream can become distorted.

And in the modern sports world, unfortunately, because of how steroids work, because they do enhance strength, because they do enhance size, and because strength and size, along with playing skill is a matter of survival as well as a matter of domination in sports.

Every athlete faces that dilemma individually and, unfortunately, in our sports society today, winning has been the ultimate denominator. And winning was what I was concerned with. In my life, it is the biggest regret of my life.

The CHAIRMAN. You are ill now, is that correct?

Mr. COURSON. Correct.

The CHAIRMAN. And although, as I understand it, the physicians will not absolutely confirm that the relationship between your health problems and your use of steroids, you believe there is, or am I wrong about that?

Mr. COURSON. To be perfectly honest, I don't really know. I believe, because I have used the drugs and because they have had implications to coronary heart disease, that there is a definite possibility. But my doctors cannot tell me.

Now, to explain my situation medically I think can help you better understand it. I have what is known as dilated cardio-myopathy. My heart is thin, the wall is thin, and it is baggy. In other words, people with dilated cardio-myopathy, 50 percent of them die within 2 years unless they have a heart transplant. My doctors have given me 4 or 5 years to live on medication, without a transplant.

Steroid use has been known to create plugging of the arteries. It has been known to create high cholesterol. It has been known to thicken heart wall muscle because the heart is a muscle, it thickens skeletal muscle along with heart wall muscle.

My heart is thin and drooping. I had low cholesterol, no clogging of the arteries. So, as far as my doctors can tell me, and from the research I have done, it is a medical unknown. That is why I stress that there is a lot about these drugs we just do not know. And that is one of my biggest concerns.

And as many athletes—you used the term 1 million. And Dr. Goldman, he wrote the book, "Death in the Locker Room," is one of the most respected analysts on steroids in this country, he suspects the number is as high as 3 million. This is a great dilemma. And I think one of the big problems is we know so little medically about steroids, and we need to find out more.

The CHAIRMAN. I think you are factually correct, and that is the testimony we received from the AMA and divergent testimony

from other physicians. But I think you are correct although I have not heard anyone arguing that they know for sure they are good.

Does anyone on the panel disagree with the assertion that, given the will to train in conjunction with the use of steroids, they in fact "work?" I do not think they should be out there. Is there disagreement on that? They do work, right?

Mr. UPSHAW. They work.

Mr. FRALIC. They make you bigger and stronger and faster.

I would like to add that Chuck Noll said that they—or Coach Schottenheimer, somebody said they make you bigger and stronger. They failed to mention that—well, maybe I will mention it.

I just came across this on the plane today. It is a U.S.A. Today, and I do not know if that means anything. [Laughter.]

A Canadian sprinter, Ben Johnson, would have been found guilty of using steroids if proper tests were given at the 1987 World Championships where he set a 100 meters world record. Richard Pond, Vice President of the International Olympic Committee, testified Monday in Toronto.

I think they make you faster too, and all these points will make anybody a better football player. It will not make a bad player a good player. Maybe, maybe not. But they will enhance anybody's ability, whatever that is.

The CHAIRMAN. What percentage of the folks that you play with, or against, do you think use steroids?

Mr. FRALIC. I think the drug is more prevalent in the offensive line, defensive line, linebackers, tight ends than it is in the other positions. And at quarterback, I think at running back you can have some there, you know, with Ben Johnson doing that. I guess, you know, guys wanting to be faster and bigger will do that.

I would say that the guys I play against—that is excluding the quarterbacks and defensive backs and wide receivers, it is probably about 75 percent.

The CHAIRMAN. Now, I am not asking you for names, but do you know that for certain? Obviously you do not know the 75 percent, but do you know players who actually use them or do you just suspect they use them? Do players openly acknowledge to one another, not to the press, but to one another that they use steroids? Or is it something that they hide?

Mr. FRALIC. I think they hide it from me lately. [Laughter.]

But I think that, going back to my college days where I documented that I tried it, I think that among friends and people who are doing it, it is talked about. It is talked about, well, where can I get some? Do you know where I can get it? Because more often than not, it is on the black market that you get it. I think it is talked about.

Do I actually know it? I cannot sit here and give you sworn affidavits from every player that does it, nor can I point to any testing because of the procedure that has been implemented in the NFL for the last few years that says only 6 percent take steroids. So I have nothing other than the fact that I am here, I am in the game, and I know as much about what goes on in the everyday life of an NFL football player and what goes on around me, and what actions people are taking to make themselves better football players, and what is an accepted norm in the game today, what is going on.

And I feel that I can be close. I might not be accurate, you know, 100 percent accurate, but I am not far off. And that is where I am coming from.

The CHAIRMAN. I kind of wish you were a defensive tackle because I would like to see you meet that guy whose name I know you are talking about but you did not mention.

Mr. FRALIC. I do not know at that weight and size, I do not know.

The CHAIRMAN. At his weight and size you are not sure you want to? I will tell you what, I would not want to meet either one of you on the field.

Something you said struck a chord that seems to go through everything any athlete has said. Great Olympians who have come and testified before us are angry because those who use steroids are cheating to become competitive with the great ones who do not use steroids. And those who use steroids suggest that they use them because they feel the game is already rigged.

They believe if everyone did not use steroids they would do just fine with their particular sprinting speed or weight lifting capability, and muscle skeletal structure and muscles.

But the fact is the game is rigged in terms of people using steroids. So the only way for them to be at parity with the people they otherwise would be better than, or at least as good as, is to do what they are doing to get there.

And it seems to me that the testimony we are hearing indicates steroids are a vicious cycle. Therefore, if everyone signed an agreement to stop tomorrow, an awful lot would stop, because at least they would feel it was not rigged.

Is that your sense of it? Is that part of it?

Mr. FRALIC. Oh, I agree with you wholeheartedly, you are right. And I think that it is not only the marginal player who might not be able to compete, with or without them, because he perceives everybody else using them. But it is also the player who can compete without them, but wants to be better because he is competing against people who he is being judged against, and they are using them.

When I was at Pitt, I started the first game that I ever went, you know, player for them as a freshman. I was an All American coming out of high school and all that, so it was not a point of where I thought I need these to compete. I needed those because I wanted to be the best there was, and I felt like everybody else was doing them. So if I want to get there—there might be a player out there that is equal to me, or there are a lot of them. And if they are going that route, hey, I am going to use it too because that is the only fair thing. If everybody else is doing it, I feel like I have got to keep up with the Joneses too, or whoever.

The CHAIRMAN. Do most players who use steroids do so under medical supervision?

I would like to ask all three of you that question, and start with you, Mr. Fralic. How much of steroid use today in the NFL is under the cover of medical treatment? I have got a doctor's note, the doctor says I should again do it.

Mr. FRALIC. Well, I think those doctors' notes, they are talked about when the reporters come and ask them why are you taking these when they get caught. You know, they come out of thin air.

And I do not know if they are ever actually produced, you know, but they say, well, I have got a doctor telling me you can do this and this will help my injury.

I do not know how much of that is actual fact or fiction. But I would imagine that a lot of players in the NFL were probably doing it without a doctor's care or getting them at the local gym where your sons work out and everybody else. It seems to be a common place to find it.

But maybe with the advent of random testing or such, they might become more prevalent, because it might be a way of figuring out when can I get this out of my system so I can pass the test and so forth. But I think probably in football, as compared to maybe Olympic sports, it is probably a lot lower as far as doctors monitoring.

The CHAIRMAN. Is that your experience?

Mr. COURSON. I think there is the football player's use of anabolic steroids and those in Olympic track and field. It seems in track and field, most of the world class athletes have a physician's care or are using them under a physician's care. Where, in football, which escalates the danger of course, a lot of players go and get their steroids off the black market or from a pharmacist that they know, or basically doing them and arranging their own cycle. Cycle is a term of dose and duration, which is a common weight lifter's term for how long you are going to be on steroids, determining them themselves, or with the help of their guru.

The CHAIRMAN. Gene, let me ask you. When was the last year that you played?

Mr. UPSHAW. 1982.

The CHAIRMAN. 1982. And in 1985, in a Sports Illustrated article, you said, and I quote, "I never knew any guys who took steroids. There's no black market of steroids. I don't think steroids are a problem in the NFL."

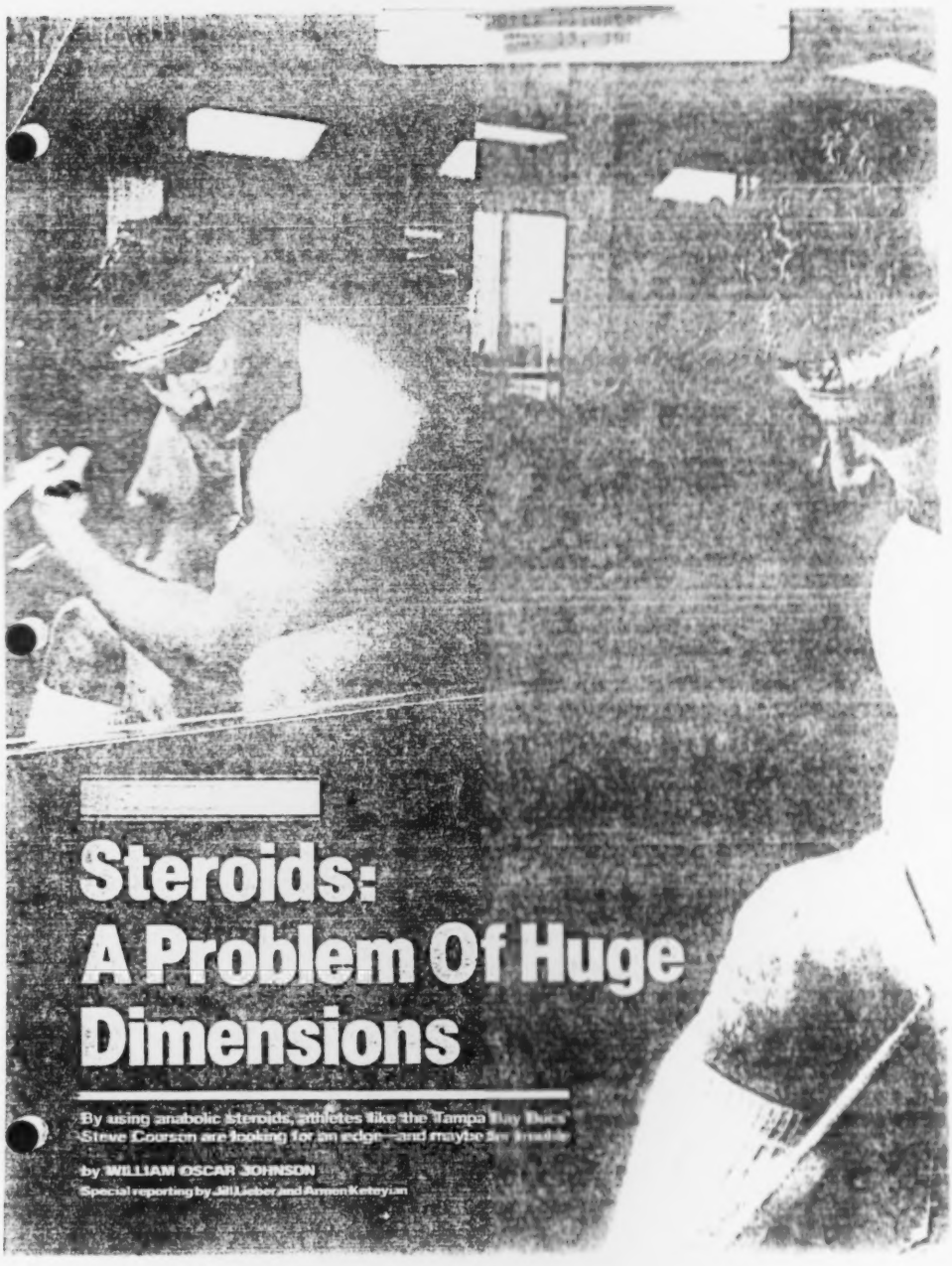
Do you still think that is true?

Mr. UPSHAW. I said that? You are sure?

The CHAIRMAN. Well, I am never sure anybody said anything. [Laughter.]

Even when it is in print. And my staff has given me an article, but let us not argue over that. I will submit the article for the record, and it does not mean you said it just because you are quoted as having said it. It was 1985 Sports Illustrated, May of 1985. But it is not a big deal.

[The article from Sports Illustrated, May 1985, follows:]



Steroids: A Problem Of Huge Dimensions

By using anabolic steroids, athletes like the Tampa Bay Bucs' Steve Courson are looking for an edge—and maybe for trouble

by WILLIAM OSCAR JOHNSON

Special reporting by Jill Lieber and Armen Keteyian

STEROIDS continued

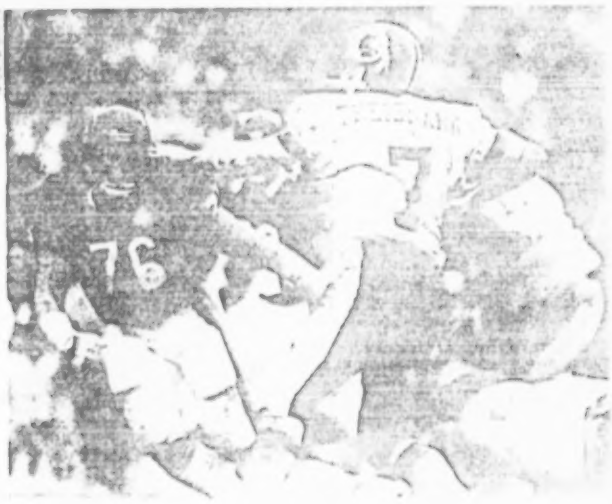
It is a spreading wildfire that is touching athletes at every level of sport. From NFL stars to iron pumpers in small-town gyms, from high school bench warmers to college All-Americas, thousands of American athletes, both male and female, are routinely ingesting or injecting anabolic steroids to increase their strength or improve their all-around sense of athletic and personal self-worth.

None of these drugs is supposed to be dispensed without a physician's prescription, yet a veritable cornucopia of them is available on a massive black market so blatant in its contempt for law enforcement that major dealers regularly send out direct-mail advertising and catalogs listing prices and shipping costs. In some instances coaches dispense steroids to players. Players sell them to other players. Some doctors and pharmacists freely prescribe or dispense them to athletes. Owners of some bodybuilding and weightlifting gyms and hangers-on at such places peddle them like chewing gum. Jocks in almost every sport use the stuff—track and field, swimming, boxing, wrestling, triathlon, cycling and, of course, powerlifting and bodybuilding. Tony Fisher, 24, who plans to compete in June for the title of Mr. Pittsburgh, said, "You enter a competition in bodybuilding without using steroids and it's like sending your girl friend into the Miss America Pageant without makeup or eye shadow."

There are also many football players who use steroids, although estimates of just how many vary widely and wildly. Buffalo Bills nose tackle Fred Smerlas says he thinks 40% of NFL players use steroids. Other NFL players put the figure as high as 90%. That is probably on the high side—there's a tendency among athletes to assume that opponents, especially successful ones, are cheating—but it's clear that steroid use in the NFL is substantial, especially among linemen. SI interviewed 25 NFL players, only two of whom admitted to currently using ste-

According to Alzado (77), steroids have long been a fact of life around the NFL.

By prescription or on the black market, the supply of steroids is meeting the demand.



The Bears' McMichael (76) says he took steroids after his first season in Texas.

Sandlin says he's a former user who still gets calls for advice.

NFL Players Association, who for 16 years was a star guard with the Raiders, also takes a see-no-evil position and issues a string of denials. "I never knew any guys who took steroids." And: "There's no black market of steroids." Again: "I don't think steroids are a problem in the NFL."

But steroids *are* a problem in the NFL—and throughout sports. Apart from the fact that they do pose health hazards and that many players are obtaining them illegally, possibly exposing them to criminal elements, there's the ethical question of whether athletes should be using drugs to enhance their performances. On the subject of medical ethics generally, B.J. Anderson, the American Medical Association's associate general counsel, said last week, "The position of the physician has to be that it is unethical to provide worthless services that won't aid the health of the patient." Transposed to the world of sports, the ethical questions become clear enough. Should athletes be creatures of the laboratory? Do we want better sports through chemistry?

These questions are particularly pressing in view of the generally uncritical acceptance of anabolic steroids among NFL players. Lyle Alzado, 36, a 14-year veteran NFL defensive end formerly with Denver and Cleveland, now with the Raiders, said last week, "On some teams, between 75 and 90 percent of all athletes use steroids." Not quarterbacks or kickers, he added, but many of the others. "Steroids create more raw power, speed, endurance. Some of the oldtime players have gotten by without using them, but a player cannot compete today at a topnotch level of football without an aid of some sort," Alzado said.

And what about the USFL? Kent Hull, the center for the New Jersey Generals, said, "You can find steroids in every pro locker room. It is not a minute thing. It gets to a point where some guys, especially at the pro level, think they have to do it to make it." A New Jersey teammate, defensive end Jim Byrne, adds: "It's big in the USFL because if you don't make it here, you're thrown right out into the real world."

College football? Charles J. Radler, a former suburban Pittsburgh pizza-shop owner who became the nation's No. 1 steroid dealer (see page 56), was sent to prison in March for dealing in illicit drugs. Radler had more than 700 names on his customer list at the peak of his operation, and when asked in prison the other day how many of them were on college campuses, he replied, "The more I think about that, half had to be sent to colleges, to people on college campuses."

Genslinger (with his wife, Kathy) has had the steroid highs and lows.

Recent events indicate that steroid use on campuses is prevalent indeed, in spite of denials by many college coaches in football and other sports. Last month 32 Vanderbilt football players, past and present, were listed as unindicted co-conspirators in a case in Nashville involving the illegal sale and distribution of steroids. The Bears' McMichael, who admits to having used steroids after his senior year at Texas, said, "Vanderbilt is the straw that broke the camel's back. There are [players at] a bunch of other schools who are doing steroids, too. The whole college deal has gotten out of hand." Pat Donovan, 31, a Dallas Cowboy offensive lineman for nine years who retired in 1983, said, "Steroids are very, very accepted in the NFL. In my last five or six years it ran as high as 60 to 70 percent on the Cowboys on the offensive and defensive lines." Donovan said he felt sorriest for the college kids who are trying to emulate the pros. "In the pros the guys are compensated for taking the risk." Donovan added that college head coaches "know about it and encourage the abuse or they look the other way and don't counsel the kids."

Kim Wood, the Cincinnati Bengals' strength coach for the past 11 years, also considers head coaches culpable—in the pro and college ranks alike. "They pressure the strength coaches and say, 'How can we get big and strong?'" says Wood. "Strength coaches justify giving steroids to their kids this way: 'It's my job to get them good stuff, not let them go to some scumbag on the streets.' They say, 'Steroids are the individual's decision,' but somehow the drug seems to always be there."

Finally, steroid use also appears to be rapidly increasing among high school athletes. Wood, who's particularly outspoken on the dangers of steroids—he believes that the Bengals are relatively clean—says this sorry development is fu-

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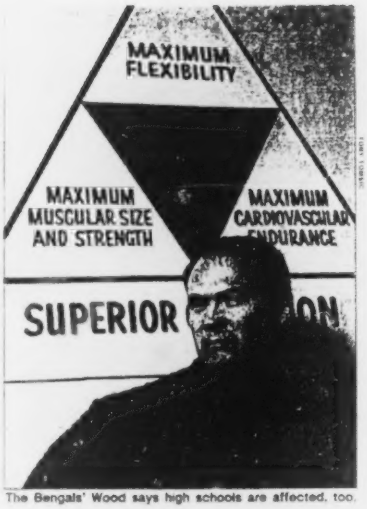
STEROIDS *continued*



The Bengals' Wood says high schools are affected, too.

eled not only by visions of future collegiate and professional athletic glory but also by growing reliance on steroids as a way of dealing with the self-doubts of young boys about their masculinity. "Unfortunately, this is the kind of problem that most teenagers have, so they can be easily exploited," Wood says. "Steroids have become the thing for kids to do. In the last few years they have become very big in high school."

Just how far and wide has the steroid culture now spread? Richard Sandlin, 27, a former strength consultant at Alabama who has a master's degree in exercise physiology and computer science and is a world-ranked powerlifter, acknowledged that he is a former steroid user and said that he has served as a kind of consultant over the past six years to players, coaches and others interested in getting the lowdown on steroids. Sandlin, who lives in Tuscaloosa, Ala. and has a company that produces medical software for nutrition and fitness programs, says of his callers, "They want to know what type of cycles to go on and how long to stay on the cycle. And they want to know basically what drugs to use, what drugs are harmful, what combinations are harmful, what combinations are best." Sandlin said his answers included accounts of "what happened to me and what could happen to them. I personally have reaped a lot of kidney and liver problems [from steroids]."

Sandlin said that those who have approached him for information include a variety of coaches or athletes, apparently acting on their own, from LSU, Alabama, Auburn, Texas, USC, Washington, Washington State, California, Arizona State, Nebraska, Arkansas, Oklahoma, Texas A&M, SMU, Pitt, Virginia, Clemson, Tennessee, Kentucky, Louisville, Georgia, Vanderbilt, Florida and Florida State. He said he has also given advice to at least 40 steroid users or would-be users on NFL and USFL teams, including the New York Giants and Jets, Green Bay Packers, Seattle Seahawks, San Diego Chargers, New Orleans Saints, Los Angeles Raiders, New England Patriots, Detroit Lions, Cleveland Browns, Atlanta Falcons, Miami Dolphins, Portland Breakers and Houston Gamblers.

The NFL says it doesn't know which, if any, of its teams test players for steroid use. About 20 colleges do, even though the NCAA has no rules prohibiting such use. But Tony Daly, the medical director for the Los Angeles Olympic Organizing Committee, said it would cost a minimum of $750,000 to set up an effective testing facility and added that the facility at UCLA used to test athletes at the 1984 Summer Games is the only internationally accredited lab in the U.S. He said, "If you're not using a sophisticated lab, an athlete could use steroids up to 10 days before the test and still have the effects, but his concentrations would be low enough that he would be able to pass the test." The NCAA's Special Committee on National Drug Testing Policy is scheduled to meet on May 16 to formulate a national testing policy. In the meantime, most of the schools now testing for steroids do so at local hospitals, and Eric Zemper, the NCAA staff liaison to the committee, admits, "Those places just aren't prepared to test for steroids."

For young athletes the question of whether or not to use steroids is inescapable. More than ever before, their answer is likely to be yes. As Courson, who says he spends "a couple grand a year" on steroids, put it, "I think everybody faces the question: Do I want to go on [them]? It happens to everybody at some point in their career. At every level. It's like you're cheating when you use drugs, but then again, everyone else is cheating, too. We'd all be better off if steroids weren't around—everyone would be better off."

But they are around, and have been since 1935, when Charles Kochakian, now an endocrinologist at the University of Alabama-Birmingham, synthesized an anabolic steroid. Anabolic steroids are various synthetic derivatives of testosterone, a male hormone. The drug has been used over the years to stimulate a buildup of the body by synthesizing protein for muscle growth and tissue repair. It is used primarily for those recovering from major surgery or those with chronic debilitating diseases. Today there are numerous anabolic agents, three of the most commonly used being Anadrol, Deca-Durabolin and Anavar. There is also a substance called growth hormone, which is extracted from the pituitary glands of human cadavers and is now also available in synthetic form. Physicians use growth hormone for individuals who are not growing at a normal rate. Consumption of growth hormone in excessive amounts has been known to cause the development of overly large hands, feet and skulls.

The medical profession is still not in total agreement about whether or how much steroids improve athletic performance, even though many athletes believe that they gain the extra strength that enables them to perform better. The risks inherent in the administration of steroids include liver and kidney disorders, hypertension, decreased sperm count, aggressive behavior and impotence in men, and menstrual irregularities and masculinization in women. Some of the side effects are believed by medical experts to be irreversible.

There are also psychological side effects from steroid usage. Steroids are sometimes addictive, producing a sense of supersized manhood that can only be maintained through continuing or increased usage. Scott Genslinger, 28, is a bodybuilder from Pennsylvania who in

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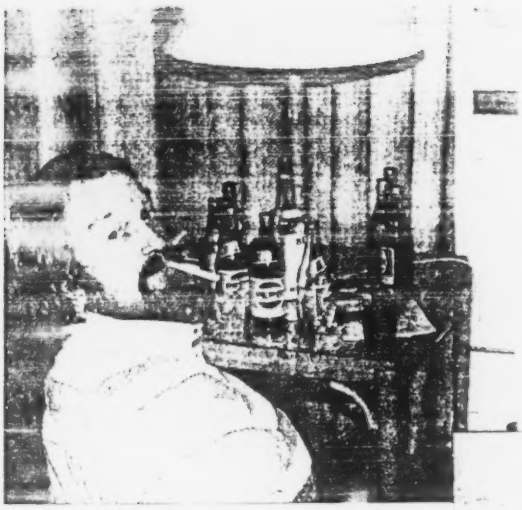

ing championships and drummed up trade in steroids and other drugs. Radler told federal investigators: "If there's a meet and Tony's at ... You can count on it that he's got a couple of suitcases full of drugs there that he's going to sell off at that place. ... He always has a room. ... They have a long line out in the hall of all the lifters, you know, two pounds overweight still ... and they got to shoot them all up with Lasix [a diuretic], blow their water off, and they make weight."

Now if only sports administrators and coaches would get as serious about the situation as the FDA and Justice Department appear to be. "I feel confident that steroids are not being dispensed to any heavy degree by the clubs," the NFL's Rozelle insisted last week. "But you can't stop someone from getting them on the outside. We tell them, first, it's debatable as to whether or not it improves your performance and, second, we tell them about potential side effects. I don't think steroid use is that big—with the clubs not dispensing steroids and with athletes not being overly prone to buy it if they have to pay for it." In much the same vein, the NFLPA president, Tom Condon, an offensive guard for the Kansas City Chiefs, said, "Steroids might be a problem in colleges. They might be a problem in track and field. But they're a non-factor in professional football. I've never seen anybody take anything. I don't know about them."

Maybe it's high time that the people who run sports take a closer look.

CONTINUED

One of the nation's biggest dealers, Fitton is wanted by the Feds, who have a lot of drugs they confiscated from him.

STEROIDS *continued*

October 1981 carried 127 pounds on a 6'10" frame. By July 1982 he weighed 224. He was one of Radler's customers. At one point he was consuming growth hormone every day, plus a mix of other drugs. "I spent my savings on it, thousands of dollars," he said. "It was an addiction. The way doctors described it to me, it was similar to anorexia nervosa—except you have an obsession with being big instead of being skinny. When I was on steroids, I was afraid to step on a scale for fear I might have lost weight. If I missed a meal, I went totally nuts. It ruined my day." His wife, Kathy, said, "I'm so tired of him asking me, 'Do I look big? Do I look small?' It's annoying."

Insidious as it is, the steroid business has never been better. Much of the stuff is produced in the U.S., but some comes from Mexico, East Germany and England and is either smuggled in or imported legally through customs. There are also many small generic drug manufacturers in the U.S. that have sprung up in the past few years and are eager to feed the growing market. In most states it is a misdemeanor to distribute prescription drugs without a license. State enforcement is often lax. To obtain a license, Radler needed only to fill out a Pennsylvania Department of Health application, be visited by an inspector and put a $100 fee. That he could run all the prescription prescription drugs that he wanted. Greg Nescott, the Allegheny County Assistant District Attorney, whose office is in Pittsburgh and who prosecuted Radler, said, "Nobody has taken steroids seriously because it's not heroin and it's not cocaine. It's clear now that these things can be dangerous drugs."

One sign that authorities may finally be taking steroids seriously is an unprecedented joint investigation into steroid trafficking now being conducted by the Food and Drug Administration and the Justice Department. Another sign is the case in San Diego that resulted in a guilty plea last February by Tony Fitton, who for the past decade was one of the top dealers in the U.S. Fitton was arrested on Nov. 12, 1984 at a border crossing between Mexico and California carrying 2,040 boxes of Dianabol and other steroids in a rented car. Fitton failed to appear for sentencing and is a fugitive. "He may have been the biggest dealer in the world," said Phil Halpern, the assistant U.S. attorney who prosecuted the case. "Fitton deals at the highest level. His major customers were gym owners, fitness centers, trainers and colleges."

Fitton went to all the major powerlifting championships and drummed up trade in steroids and other drugs. Radler told federal investigators: "If there's a meet and Tony's at ... You can count on it that he's got a couple of suitcases full of drugs there that he's going to sell off at that place. ... He always has a room. ... They have a long line out in the hall of all the lifters, you know, two pounds overweight still ... and they got to shoot them all up with Lasix [a diuretic], blow their water off, and they make weight."

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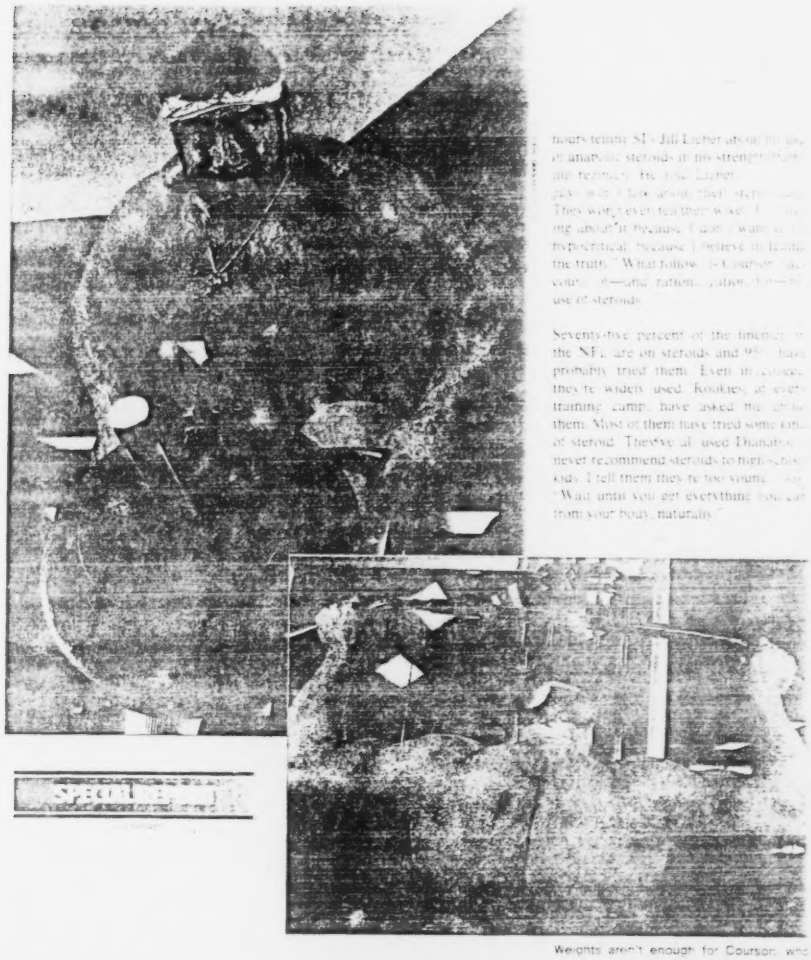


Weights aren't enough for Courson, who says steroids help him survive in the NFL

Getting Physical–And Chemical

Steve Courson, 29, is an offensive guard with the Tampa Bay Buccaneers. He stands 6'3" and weighs 265 pounds. He was with the Pittsburgh Steelers for seven years before going to Tampa in 1984. An articulate, intelligent young man, he is a military history enthusiast who loves the wars of Greece and Persia, and has a large collection of books about World War II. He likes classical music and his car resounds with the tuneful music of Wagner, Bach, Beethoven and Mozart. Sometimes he switches to Berlitz German tapes. Courson spent [illegible] hours telling SI's Jill Lieber about his use of anabolic steroids in his strength-training regimen. He told Lieber [illegible] gave [illegible] to [illegible] They won't even tell their wives. I'm telling about it because I don't want to be hypocritical, because I believe in telling the truth." What follows is Courson's account—and rationalization—of his use of steroids.

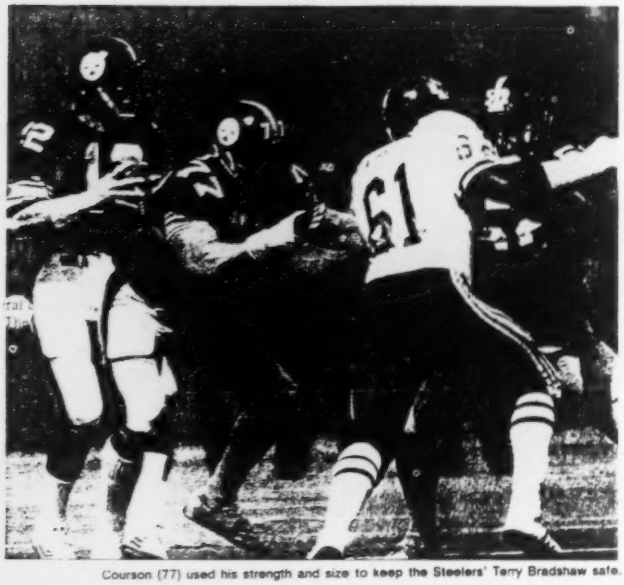
Seventy-five percent of the linemen in the NFL are on steroids and 95% have probably tried them. Even in college, they're widely used. Rookies, at every training camp, have asked me about them. Most of them have tried some kind of steroid. They've all used Dianabol. I never recommend steroids to high school kids. I tell them they're too young. I say, "Wait until you get everything you can from your body, naturally."

But in football, as in life, only the strong survive. You're pressured that by your coaches and your parents from the time you're very young. The strongest people—the strongest athletes in the world—are all using steroids. They're getting over not only in the strength field, but also in track and field and in swimming. So you've got to get an edge if you want to survive.

STEROIDS *continued*

My freshman year in college [South Carolina] I got banged around by older, stronger kids. I knew at the time I had to do a lot of work. I knew I had to go on drugs. I wasn't going to be out there just to be out there. I had to be the best. I only did steroids the summer before my sophomore year. My body weight went from 225 to 260 in a month and a half. I didn't will win out. When I weighed 250 or 260 I could be pushed around by taller, stronger guys.

Steroids are a different realm of drug from speed or painkillers. They enhance your natural ability. They are a building block. They can take you somewhere. I can't condone steroid use, but I can morally accept it as an aid. I know that if I



Courson (77) used his strength and size to keep the Steelers' Terry Bradshaw safe.

need them after that. I was plenty strong enough already. In football, if you use steroids too much, you get muscle tears. You aren't mobile. I don't need them now to gain weight. I'm 6' 1", 285. I can't put too much more weight on my frame. I just want to be stronger. These last three years I did steroids for eight to 12 weeks in the off-season.

Unless you're a freak of nature, you can't get away from that kind of training. It stands to reason, if you have two guys, one on either side of the line, and each weighs 250, the guy who's the stronger don't use steroids, I won't be the best I can be.

I'm sure there are a lot of football players doing less steroids than I do. For football players, I'm probably doing a lot. Bodybuilders and powerlifters are doing much, much more. I'd take more, too, but I'm afraid to. First, I don't want to be any bigger, and second, I don't want to lose my mobility.

I use roids to build up my strength in the off-season, but I never use speed to play. Guys are out there using speed. Why don't they outlaw *that*? Coaches say, "Hey, steroids are no good for you." Well, how good is taking a painkiller in the ankle or the knee? The whole thing is hypocritical. What's wrong with a football player building his body as strong as he can with steroids? I know I have to play a 16-game season, and to survive without serious injury I have to be as strong as I possibly can be.

I get more enjoyment out of being in a weight room and training—feeling bigger, stronger, seeing myself improve—than when I've read a book. I will keep doing steroids till I see adverse effects in my performance. I want to be strong, but I don't have room for more weight. I want to dead-lift over 1,000 pounds. I want to bench 600 pounds. No football player has done either. I think I can do that within this year.

I ask other players how much they bench. Usually they ask me first: It's a common measuring stick. [The bench press movement is] exactly like going against a defensive lineman. You try to smack him with both hands, raising his shoulders back. You're trying to buy time for the quarterback. Coming out of a stance is like a squat-lift motion. Force moves from the feet through the hips and back. It comes from your pecs, your shoulders, your upper arms, your hands. You've got to be strong to initiate enough shock. You see his head snap back. It feels good to deliver a blow like that.

I can't believe how big steroids are. And the kids! I can't believe the people who use steroids. They just want to be bigger; they aren't doing it for sport—or business.

I look at lifting weights as building a set of my own protective armor, because what we wear out there isn't enough. You take such a pounding out there, even going against people your own size and quickness. You've got to spend the off-season refitting your own armor. It's like refitting tanks during World War II.

In order to compete at this business, you absolutely have to know the pluses and minuses that come along with using steroids. Maybe kidney and liver disease when you're older.

But you do what you have to do, otherwise you don't have your job. I don't want to leave this game broken and crippled. And I know that, with steroids, I have less chance of being broken and crippled because I will be stronger. Of

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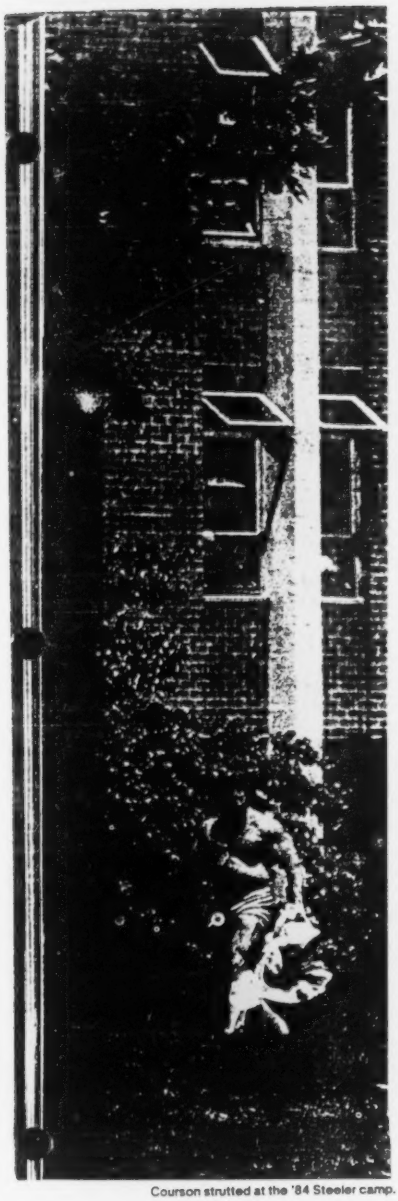

Courson strutted at the '84 Steeler camp.

course, anyone who uses steroids wants more research done. We want to know what we'll be facing 50, 60—even 20—years from now. Then it will be easier to make a concrete choice about using steroids. Right now, there's an X factor. You don't know what the X factor is, but you do know you're reaping benefits. In mini-camp [last month] I had Tampa Bay test my liver. I want to know what the steroids are doing to me. I don't have the results yet.

Everyone's cycle is different. It's a chemical thing in your body. When I use steroids, I don't want my weight to go up. I want to increase my strength only. I started on a cycle beginning last January. I weighed 272. I waited until after the season, when I had no bumps and bruises. I needed the time for my body to heal. At the end of the season, your strength is depleted. You try to maintain the strength you reach in the off-season, but it's impossible.

So I came to Boulder [Colo.] to train and got started in the middle of January. I was working six days a week, twice a day. In the mornings, I worked on bench presses, inclines, dead lifts and squats. In the evenings, I worked on assistance muscles, doing leg extensions, triceps, weighted dips. I worked on specific muscle groups, isolated them.

On my first eight-week cycle I did anabolics in doses of descending order. I took Winstrol, that's an oral. I took Anavar, another oral. I took Deca-Durabolin, an injectable. I took the orals every day. I injected once or twice a week. For instance, I injected 300 milligrams of Deca-Durabolin in both weeks 1 and 2 along with 50 milligrams a day of Winstrol and 50 a day of Anavar. [According to a standard textbook, *The Pharmacological Basis of Therapeutics*, the recommended dosage for medical purposes is 50 to 100 milligrams every three to four weeks for Deca-Durabolin, six milligrams a day for Winstrol and five to 10 milligrams a day for Anavar.]

When you're in the middle of the juice, on a cycle, you feel like you could bench-press every day. I haven't, but I feel like I could. When you're in the middle of a cycle, you don't know what can happen in your lifts. You have increases that surprise you. Once when I was on the juice, near the middle of a cycle, I benched six to eight reps at 450 pounds, then three days later did six to eight reps at 475. That's 25 pounds in three days!

The heaviest cycle I've ever been on was before the last NFL weightlifting contest [a made-for-TV event not sanctioned by the league] in 1982. I took oral Dianabol, Anadrol-50, Anavar and Winstrol. In the last weeks of that cycle, man, I was real irritable. I had bad abdominal cramps. I went home to help my father in the yard, and I was bending over, and I had the worst cramps. I was doing three Anadrol-50s a day, and I cut them out. There were times when I was standing in the kitchen with my friend who's a powerlifter and who injects me, and we said to ourselves, "What are we? Crazy?" And then I tell myself that I'm doing this just so I can be better at my job.

The only negative side effects I've experienced are that I break out a little on the skin, and I get irritable and very aggressive. You have a shorter temper, so you avoid situations that will aggravate you. Another side effect is sexual. It's *real* bad, although it depends on the individual. I feel more impulsive.

At my size, clothes are hard to find. Suits bind me. I've got to worry about ripping the sleeves out of my shirts. The first couple of years in the league I had everything tailor-made. My measurements are pretty bizarre. My neck, which is the most unusual, is 22¼", thighs 29", calves 18", waist 38½", chest 58" and biceps 20½". When you're on a cycle, you can see the changes as they happen.

I've taken my chances with drugs, and I've seen the results. At mini-camp I found out my heart was beating real fast—150 beats a minute, resting. But it can be controlled through medication. Doctors say it is just a temporary condition. I asked two doctors if steroids had anything to do with it. Both said they could have been a contributing factor but they weren't sure. I don't think they were the major reason. I was just burning the candle at both ends, drinking a lot of beer and working out real hard.

Football is my business. I take this attitude toward drugs: They give me an edge in my business. I don't regret anything I've done so far as pharmaceutical use is concerned. It's very easy for people on the outside to criticize. But it's different when it's your livelihood, when it's your job to keep a genetic mutation from getting into your backfield.

The CHAIRMAN. The question is, now, how big a deal do you think steroids are in pro football?

Mr. UPSHAW. Well, I beleive that we do have steroids in pro football. I would be naive not to believe that. But I do not believe they are as high as Bill says they are. And they may be a little higher than what Commissioner Rozelle says.

Until we can gather enough data to really know for sure, we all speculate in knowing what it is. I mean Bill said that guys are bigger and stronger and faster. I agree with that. They are bigger, stronger and faster. But they were bigger years ago too. I mean not as many, but there were some.

I played on an offensive line with Bob Brown, who was 300 pounds; with Art Schell who was over 300 pounds. I played against guys, such as Buck Buchanan, Louie Kelcher, Russ Washington, Ernie Ladd. These guys were all 300-pound guys. And it all sort of started back then when Hank Stram won the Super Bowel. And he had those big offensive linemen, and almost every one was over 300 pounds.

But it is there. I do not think it is as high. And we are not running away from this problem. We just need to address it.

The CHAIRMAN. Bill, are you a player rep for the——

Mr. FRALIC. Yes.

Mr. UPSHAW. Do not start anything.

The CHAIRMAN. All right. [Laughter.]

I just wondered if you guys were on the same team. I do not know. You seem to have a different position.

Mr. FRALIC. I believe this problem supersedes, if you want to say any bargaining agreement or anything. I do not think it is a labor problem, labor-management. I think it is an ethical problem, a moral problem, a moral issue, and it should be addressed as such.

The CHAIRMAN. Let me ask you both the following question and then I will yield.

All three of you, but particularly you two guys, have indicated that there is a lot of pressure on you. Pressure from everyone including the owner to make sure that he has a team that is producing income, to the coaches whose jobs are even less secure than Congress persons to players who want to keep their jobs and their paychecks. And you have all indicated that trickles down to the college ball player who wants to make it in the pros, and the high school kid who sees he wants to make it at a name college, et cetera. So there is a lot of pressure out there.

What do you think of the idea of sanctioning the eligibility of a college player after notice is given—and notice would be given at any time there would be an agreement? From that point on, anyone who tested positive for steroids in college would be sanctioned in some way if they were drafted by the NFL. Either they could not be drafted for a year, or once they were drafted they could not play for the first 30 days, which would obviously inhibit someone from drafting them. In other words, some sanction connected with the use, after due notice was given, that there would be a penalty paid to come into the NFL.

Mr. UPSHAW. Well, I agree with Mr. Jay Moyer. I really believe that if you try to implement something such as that today, it is a boycott, and I think legally you would be walking on very thin ice.

That is just my opinion about it. And he is not within our bargaining unit and not within the jurisdiction of the NFL, I do not know how you can keep him out.

The CHAIRMAN. Well, it seems to me you could pass an agreement that said if you committed an act that is viewed as injurious to the health of the player, as well as the league, you cannot play.

Assuming it was legal, what would be your position?

Mr. UPSHAW. We have penalties for different offenses within the NFL now. And my only approach is it has to be something we jointly agree to do. And we have to have the force of the collective bargaining agreement to enforce whatever we agree to. And I think Commissioner Rozelle thought the same way, and I do not want to put words in his mouth.

But we both need that agreement so we know what the rules are and we are willing to live up to those rules if we can just get to that point.

The CHAIRMAN. Bill.

Mr. FRALIC. I think if you are going to treat them as an NFL player, potential player, you are going to have to—hopefully we can get the testing here—we have the testing, I guess, as well as anybody else in the world to test, but we are only testing one time, or at least the technology.

I do not believe all the colleges have the access to that technology that the NFL does for the resources probably, the funding. It is an expensive test.

I think that something should be done if these players test positive in this NFL scouting combine that takes place in January or February before the upcoming following draft, where the NFL supervises this and, you know, is in charge of it.

I think then if the player tests positive, something should be done because if he is treated like nothing happened, such as these two players I think were treated but tested positive, that were drafted in the first round, one by Pittsburgh, one by San Diego, they are not only getting by the system and breaking rules to get there, but they are hurting somebody else's chances. Who knows who those teams would have taken if these guys were not allowed to be there because they cheated. You know, someone else was lower in the draft and, therefore, it cost them money. You know, I do not think that is fair.

What should be done about it? I do not know. But I think all that should be taken into account.

The CHAIRMAN. Well, again, I do not have any answer to that. I just raise it as trying to get some parameters here about what——

Mr. FRALIC. I am all for anything that you do if somebody gets caught doing it.

The CHAIRMAN [continuing]. What should be done. But it seems to me that, unlike other drugs, Gene, if an owner and a coach know that John Smith, has tested positive, been arrested for, or had a problem with cocaine or any other drug, there would be a real debate going on in the front office, no matter how good he is, whether to draft him—not for altruistic reasons—but because he may not show up. He may come and OD on coke the third game and be gone, and a big investment would be lost. Or he may get arrested and put in prison and the investment lost.

But steroids are a different category. Steroids are not illegal in the sense that they could take them. It obviously does enhance their strength, and the one thing you do not worry about is the guy not showing up for the game because he used steroids.

So it seems to me that—and I am not in any way maligning any particular owner, if I were an owner, I would sit there and think gosh, this guy is the best offensive lineman of the year, and he weighs 296 pounds, runs the 40 in 4:6, hits like a freight train, and loves to hurt people. And, boy, I can build a franchise around this guy, or at least I can help. Yes, I know he uses steroids but, you know, they are not illegal even though the NFL policy says they will not use them any more.

And I might be turning around and asking my team physician, if the guy stops using them under this new policy, what is the most he is going to drop in weight and ability? And I think that is the discussion that is going to take place. And it seems to me that something has got to be done beyond what is being done by the Players Association, with all due respect, as well as management. But that is just me. I do not own a team. I am not looking to pass any laws that are going to require you all to do anything at this point. I am looking maybe to pass a law to make this a controlled substance, which is a different question. But that is the reason why I have asked all these questions.

You can comment on what I said, any one of you, and then I yield to my colleague from Pennsylvania.

Mr. FRALIC. I would like to say that if you could put pressure on to maybe get this agreement worked out, as Mr. Specter said, why wait for all these economic issues to be ironed out and then go to the drug issue? I think that maybe something could be done with the drug issue. And when the other things can be worked out, which will probably be in court, fine, but why hold this important topic up right now, subject with some other lingering problems?

The CHAIRMAN. I do not disagree with that because, as I said at the outset, we are never going to solve the drug problem in this country, until there is a change of attitude of this country about the consumption of anything that is not a natural prescribed substance for the body.

Everything about us seems to be bent upon some kind of chemical help. You turn on the TV, and you have a guy sitting there with his wife, after dinner, saying, oh, honey, I have got this job interview tomorrow. I do not know whether I can do it. She says, uh-huh, take "blank" and you will have a good night's sleep. And then tomorrow, when you get up, take another one of those and you will be calm going into the interview.

Seriously, think about it. That is our mentality. Unless we start striking out at that mentality, we can pass all the tough laws and death penalties we want about other drugs and it is not going to change much. Gene, do you want to comment?

Mr. UPSHAW. No. I wanted to make one comment, and that has to do with the Anti-Drug Abuse Act of 1988.

The Comptroller General will be releasing a report that will contain all of the information on steroids and growth hormones. And I think that report will be out in June, and it should be interesting. We should take a look at that.

The CHAIRMAN. Valid point. And that is why we put it in there. It is a valid point.

Mr. UPSHAW. But the other point that I want to raise,, I mean I have heard a lot about we need random testing to deal with this problem. You are correct, testing in and of itself will not answer all of our concerns about anabolic steroids or any illegal drug.

The thing about the steroid use, I mean I usually visit all of the teams, and the offensive linemen always seem to talk to each other. We have a certain way of communicating.

The CHAIRMAN. It comes from those years of nonrecognition, right?

Mr. UPSHAW. Yes, yes. But if you tell an offensive lineman he will be better, he will be stronger if he chews that table, you will see them all around there biting on it. I mean that is the mentality that is in the sport is that edge, is to win at all costs.

And with steroid use, you do not need testing. I mean they conceded that. I mean Bill knows. A guy did not show up one week weighing 250 pounds, and you see him 3 months later and he is 290 pounds, and he is cut—that is the term they use, cut—and they know that the guy did not get there. You cannot eat that many potatoes and not much steak,

The CHAIRMAN. For the record, cut means muscle definition.

Mr. UPSHAW. Right.

The CHAIRMAN. I did not want anybody to think we are into sado-masochism here or something. [Laughter.]

Mr. UPSHAW. No.

The CHAIRMAN. Thank you. I yield to my colleague.

Senator SPECTER. Thank you, Mr. Chairman.

Mr. Upshaw, I join in thanking you for being here again today and bringing your able lawyer, Mr. Ben Zelenko. Appreciate your being at so many of the hearings.

I had to leave for a brief period of time, and I understand that Mr. Fralic and Mr. Courson have testified in favor of random testing. Is that true, Mr. Fralic?

Mr. FRALIC. Yes. I think that would improve on the policy that we have implemented right now.

Senator SPECTER. Mr. Courson?

Mr. COURSON. I am not in favor of random testing. And I will give a reason why, and it is based on a scientific reason.

It is because the present testing methodology we have is not capable of cleaning the sport.

Senator SPECTER. Is not the present methodology capable of making a factual determination when someone has used a steroid?

Mr. COURSON. Correct. In other words, I think the Olympic sport is a very good teacher of this. The mass spectrometer gas chromatograph which is the state of the art testing has had its problems in cleaning the Olympic sport. And I do not think, with present capabilities, that testing is going to work.

I wish there was a test there that would work. But that is one of the problems that the Olympics has faced. The human growth hormone, which is one of the newest sports enhancer drugs used by modern athletes today is virtually undetectable, and it is a very dangerous drug.

Also, water-based steroids, if stopped 3 weeks before testing, approximately 3 weeks before testing, more or less go undetected. Also, small rearrangement in the steroid molecular structure and masking drugs can confuse testing.

This I see as the biggest crux in the problem is trying to use testing as an answer. I wish there was a methodology out there that was 100 percent accurate, then the possibility and feasibility of cleaning up sports would be there. But unless I am mistaken from all the research that I have done, to my knowledge, there is no testing methodology that today is 100 percent efficient.

Senator SPECTER. Well, but when you talk about the water-based steroid not showing up if it is terminated 3 weeks prior to the testing, the answer to that is that you test sufficiently frequently so that you detect the water-based steroid.

Mr. COURSON. Correct. I understand what you are saying. But the point I would like to make, in the history of studying testing in the Olympics, the chemists have always been one step ahead of the dope detectors. And there is documentation to prove that.

And also the growth hormone, which is the rave of California body builders and of the power lifting world and the weight lifting world, is still undetectable. And that causes a problem in the testing.

Senator SPECTER. Well, my understanding of the technology is that the testing can make a determination of the use of steroids. It may be that somebody will figure out something which will be undetectable and is one step away from having a new device which will detect that.

When you make a point about 100 percent testing, I do not believe anybody can make a 100 percent guarantee about anything. Our testing devices are sufficient so that if we employed them, we would certainly detect most, if not virtually all, if not all. So, it is a judgment about doing the best we can, and it is a policy consideration as to whether we want to go as far as we can.

I understand the limitation which you see. If you were satisfied that the testing were 100 percent, then you would say okay?

Mr. COURSON. Absolutely.

Senator SPECTER. Mr. Upshaw, I was not here when you testified so if I cover some ground repetitively, I regret that, and I will not do so unduly.

But are you in favor of random testing for steroids?

Mr. UPSHAW. Well, I am here representing the players of the National Football League. And we have surveyed the players on numerous occasions. And to this point, the players are still opposed to random drug testing.

I mean Bill and I, that is the beauty of our union. We have diverse views from all over, and we must operate under the majority. And the majority has constantly said no.

Senator SPECTER. Have you conducted a poll? Have you conducted a referendum—well, wait just a minute. We will give Mr. Fralic a chance. But have you had a referendum on the question?

Mr. FRALIC. Yes.

Senator SPECTER. An actual vote among the players.

Mr. UPSHAW. Yes.

Senator SPECTER. And what was the tally?

Mr. UPSHAW. We had one, it was over 75 percent. St. Petersburg Times did a study that was the blind poll that they did just recently.

Senator SPECTER. But how about your Association? You have an Association of players.

Mr. UPSHAW. Yes, 75 percent as being——

Senator SPECTER. Your Association conducted a vote among the players, and 75 percent said they were not in favor of random testing?

Mr. UPSHAW. That is correct.

Senator SPECTER. Well, I can understand that, but speaking for myself, I do not think that ought to be the determinant. I can understand in your position as an elected representative that you have to take heavy stock in what your constituency says. That is not an unknown quality for people sitting on this side of the panel. We understand that as well as you do. We have perhaps greater latitude in expressing a position because our reelection is not determined solely by the professional football players as yours is.

If the players want to be free to take steroids, which is essentially that determination, you could ascribe other reasons to it, but I think the basic reason is that they want to be free to act as they do at the present time, then it may be necessary to have some other determination made. Congress could legislate it to be illegal to use steroids. We can make a determination of public policy that it is illegal, as we made the determination with a variety of other drugs, or management can impose the rule, subject it to a court test.

However, my own sense from this hearing is that there is sort of a collective wink on the use of steroids, that no one really wants to face up to the problem. Perhaps if the players understood that we use the expression "level playing field" all the time on trade matters, this is really one area where a level playing field has some significance.

If everybody knew that nobody else was going to have an advantage, then the players might say, well, we will be willing to compete as long as the other guy is compelled to play fair as well. Their attitude might be different if they were told a system will be devised which will not allow the other man to cheat, and everybody is going to be on the level playing field. Do you think there might be a different result, Mr. Upshaw?

Mr. UPSHAW. I am confident that the players would have a different result if the playing field was level, not only player against player, but player against management. That is where we run into the problems of random drug testing. How will the NFL use these results to discipline players and to get rid of players? That has been our number one problem.

Also the levels of the tests. They have taken a position that a zero tolerance, even when there are standards that stated when you fall below certain levels, that there are false positives and false negatives, and there are a lot of things that can go wrong with the test.

We have a lot of problems that we need to straighten out collectively, and that has been our biggest objection to random drug testing. We have not had any input in that.

Senator SPECTER. So you are saying if you could sit down with the management, with the owners and the league, and establish the parameter of the test, and then establish uniform rules as to what the consequences would be, what the discipline, what the penalty would be, that you believe, in that context, the Players Association, the players would be agreeable to such testing?

Mr. UPSHAW. We have no problem with agreeing to a policy if we jointly agree to it and administer it.

I mentioned earlier that NBA's program is seen as one of the top program because you have labor and management pushing on the same issue.

Commissioner Rozelle stated that in his comments, that if we are pushing in the same direction, we can get there.

We all recognize that testing in and of itself is not the answer. I mean we had a player this past season who was being tested and tested quite frequently. And he was suspended just before the Super Bowl.

So, testing by itself, we have got to get deeper into the problem. We are not trying to hide from our responsibility as role models or as leaders in our communities. We recognize those positions. But we also have certain basic rights that we still have to protect. And as a union, and as executive director, I must, you know, live up to those standards.

Senator SPECTER. Well, I respect that, and I certainly would encourage you to do that. It has to be fair and it has to be comprehensive. Has basketball solved the issue are you saying?

Mr. UPSHAW. I do not think anyone has solved the issue. I think the issue is bigger than just coming up with a policy that is going to work, and that will be to answer it.

I think they have taken a big step. I think they have taken a tremendous step. We have what it takes to do the same thing in our sport. Just collectively, we have not been able to do it because we have no collective bargaining agreement that will be in place that we all know what the rules are. And that seems to be the holdup.

Senator SPECTER. Would it not be possible to isolate this issue out from the other issues on collective bargaining so you would take a unified stand here?

Mr. UPSHAW. I find it very difficult to reach a piecemeal approach on this. I mean we have worked very closely, my office has worked very closely with Commissioner Rozelle as we go through this period.

Sure, there are other things that we can do. But we need to do them together.

Senator SPECTER. Well, again speaking for myself, it would be my hope that you would address this issue separately because it is a matter of major concern. If you have the basketball prototype and you have the willingness to work it out, I think you are reasonable in saying you want to work out all aspects of it, you want to have the testing adequate, you want to have the sanctions adequate, you want to know what management is going to do, you want to know what the consequences are, you want to be sure it is fair, comprehensive, recognizing constitutional rights. But it seems to me that both sides ought to get on with this issue and sever it. We have got

another panel, and it is running very late. Mr. Fralic, you had another comment you wanted to make?

Mr. FRALIC. I wanted to say that poll that Gene conducted, it was 2 or 3 years ago—I don't know, it was sometime ago. And I referred to in my statement that I took a poll among our players on our team, and I would see no reason why our team is any different than any other team in the league, that 80 percent of them had no problem with random testing; 20 percent had a problem and it was due to the fact that what will management do and how will they conduct all this? But I think the opposite is true of what Gene says. And I think the majority of the players have no problem with random drug testing, and feel it is a step in the right direction, not the final answer, but a step in the right direction.

Senator SPECTER. Well, before we move on to the college panel, I think——

Mr. COURSON. Senator Specter.

Senator SPECTER. Yes, Mr. Courson.

Mr. COURSON. I would like to make one final comment.

Senator SPECTER. Sure.

Mr. COURSON. I think one of the things that we are forgetting here, we have gotten on the steroid problem.

I think finally in order to address the steroid problem in the NCA football and pro football, the drug problem, you have to address the entire drug problem in sports.

In other words, for years, team physicians have been using injectable pain killers to numb injured parts. And when a player cannot feel pain, he has no indication of what further injury is being inflicted. This is what is called a restorative drug, pain killers, muscle relaxers, et cetera.

What we have here is a restorative versus ergogenic drug dilemma. In other words, you have the additive drugs, you have the restorative drugs.

I just kind of question how many former football players are walking around with messed up joints who suffer because of former pain killer use. I myself have been injected with pain killers for the big game. And I have been under that pressure before as an athlete. And I think that is part of the dilemma that nobody is addressing.

And it cost me playing in that Super Bowel one year. And it was my decision to do it. But just like the pressure to play in the big game, I think this dilemma has been grossly unaddressed in professional football, and I think it needs to be addressed seriously.

Senator SPECTER. Well, it is certainly not easy. It would be my hope that it would be addressed along with the balance of the issues. This panel is not going to solve it, although if it continues, there is a distinct possibility that there could be legislation coming out of the Congress on the issue. That would not be the preferable way to solve it. You are a lot better off solving your problems than leaving them lie around long enough so that the Congress undertakes an answer.

Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Gentlemen, thank you.

Mr. FRALIC. Thank you very much.

The CHAIRMAN. We really appreciate you coming. Good luck this year.

We have kept our next important panel waiting all this time, through their lunch. But I wanted to do this only to prove to an old friend, Joe Purzycki, that we really do work down here. We go right through lunch.

It is made up of Joe Purzycki, head coach of James Madison University. He started his coaching career at the University of Delaware. He moved to Delaware State in 1981 and built a team in a nationally ranked program in 1983 and 1984. He has been at James Madison University since 1985 and took JMU to Division 1-A playoffs in 1987, and he is a very interested and involved fellow.

Coach Joe Paterno, head coach at Penn State University, Coach Paterno is the second winningest coach in college football. And he has taken Penn State to 19 postseason games.

And Bo Schembechler, head coach and Athletic Director of the University of Michigan. The coach is the number one coach in college with a record of 224 wins, 63 losses, and 8 ties. And in 26 years as head coach, he has never had a losing season.

And Tubby Raymond, head coach of the University of Delaware for the past 23 years. He has won national championships 3 years, and has taken Delaware to 13 postseason games, and was the backfield coach when I was there, and had the good sense to suggest that maybe baseball was my sport. He was the baseball coach too, and that did not work for me either.

Let me begin from my left to right, and invite each of you, if you have a brief opening statement, to make it.

We will start with you, Coach Paterno.

STATEMENT OF JOE PATERNO, HEAD COACH, PENN STATE UNIVERSITY; BO SCHEMBECHLER, HEAD FOOTBALL COACH AND ATHLETIC DIRECTOR, UNIVERSITY OF MICHIGAN; HAROLD RAYMOND, HEAD COACH, UNIVERSITY OF DELAWARE; AND JOE PURZYCKI, HEAD COACH, JAMES MADISON UNIVERSITY

Mr. PATERNO. Thank you, Senator.

I am here I guess because I believe that steroids are harmful to individuals. I disagree with the professional coaches who made statements that they did not necessarily give an individual an advantage. I think they do give young college football players a tremendous advantage physically. You can see it in the development of certain people who you recruit, and other people who you may have tried to recruit and have gone to other institutions and may have been involved with steroids, and see the difference.

I agree with Coach Schottenheimer that there are viable alternatives. However, the viable alternatives are so intense and take so much time and have to be so well developed that I doubt very much that if the kid is a bona fide college student he can do it. I think there are too many——

The CHAIRMAN. Bona fide, you mean actually going to class and getting a college education?

Mr. PATERNO. Actually going to school and trying to get truly an education in the sense of not just going through Mickey Mouse courses or anything like that.

I am talking about a legitimate student. I just do not know how you can do it. I believe this was stated here several times that education obviously is our best and probably will be our most profitable effort in the long run. However, there are people who are hard core users, and I think we have to test.

We test at Penn State. Unfortunately, the type of people we get are not professionals. They aspire to be professionals, a great many of them. And even more importantly and probably a bigger problem is a lot of their families have put tremendous pressure on them to become professional football players.

The NCAA now has a volunteer program where they will come around to your campus, and they will test a number of your people. It is strictly voluntary. We have submitted to that program in the last 2 years.

Unfortunately, when I asked the NCAA to give me a list of the people who were willing to be tested, they would not give me the names of the other schools who voluntarily would test, because I wanted to find out if some of our opponents were not willing to be tested. And we are in the process to see whether legally we can put in our game contracts that "Jim Wilson went to the NCAA volunteer testing program." So our kids do not play on an unlevel field, as Senator Specter suggested.

The mention here was of dreams earlier, and I certainly share your thoughts in that area, Senator. But, unfortunately, I have a very difficult time today finding out what are the dreams of our society today. Can we dream for some of the things that I think many of us, when we were young people, dreamed about? Although I think there is more interest on material dreams, money and those kinds of things. There, that is basically the problem.

We have a bunch of people who become good athletes, at least in the level of college football I coach, who have aspirations to make college football do two things for them. Hopefully get an education, but also put them in a position where they can make a lot of money very early. And it is a very difficult thing.

I could not tell you for sure that we do not have kids using steroids. We test. Some of my trainers are on the doctors all the time, take a look at that kid. He put 25 pounds on. Is it legit? What do you hear in the weight room?

I cannot tell you that, even though we have tested and I hope as early as we can be, and I do not want to coach a kid who uses steroids. But I could not tell you we do not have some people who are using them.

The CHAIRMAN. Coach Schembechler.

STATEMENT OF MR. BO SCHEMBECHLER

Mr. SCHEMBECHLER. Thank you, Senator.

I too agree that there is a tremendous health risk and future serious health problems in the use of steroids. I also believe firmly there is a tremendous competitive edge in size, strength, speed, competitiveness, hostility, which are very important in success in the game of football.

It is tremendously important that we educate our young people, particularly those in high school, of the evils of steroid use. I also

believe firmly in random unscheduled testing, and I would believe that the National Football League, if it is to set an example, to the college athlete and to the high school athlete, must find a way to random test for steroids.

The NCAA has been testing for steroids for those universities that participate in major bowl games at the end of the year. The Rose Bowl, in 1989, the University of Michigan was tested in Ann Arbor, and tested again in California prior to the game. The NCAA also tests for championship contests in other sports. The NCAA test includes screening for other substances besides steroids, namely cocaine and marijuana, and the sanctions vary.

We also took advantage of what Joe mentioned, the NCAA off-season steroid testing program, when we tested 24 of our players this spring, the results of which we have not yet received.

As far as the University of Michigan is concerned, we test for anabolic steroids during their regularly random monthly testing in football. The number tested each month is approximately 30. The number will increase if there has been suspicion or a previous positive test.

Out of the 30 that are tested, every fifth person will be tested for steroids. Consequently, the average number tested is six. Also, additional persons may be tested if there is suspicion.

Anabolic steroid testing costs $85 for us through a laboratory in Chicago at Northwestern University. Football is the only sport where steroid testing is done randomly.

Basketball tests for street drugs on a regular schedule plus suspicion. Any athlete at the University of Michigan can be tested at any time if they desire. This can be done in strict confidentiality by contacting their coach and trainer or the team physician.

The Big 10 Conference, of which Michigan is a member, has met with their athletic trainers and team physicians in a meeting just this May. It was chaired by Dr. Robert Murphy of Ohio State University, and they recommended the following to the head football coaches and athletic directors of the member institutions.

We are in the process of selecting to finalize and to implement a steroid testing program for football. Our goal in the Big 10 Conference is a steroid free football conference. That committee is to consist of a head trainer, a team physician, a head coach, of which I will be a member, an athletic director, and a representative of the Big 10 office.

We are going to attempt to test three times per year, in the fall, sometime between the two-a-day practice sessions and the first game; in the winter, sometime between January and March; and in the spring, sometime between April and May.

The 22 starters and six alternates will most likely be tested. We will have 10 crew chiefs to test at each school for validity, using NCAA protocol. The testing to be unannounced, within a reasonable time period, but still consistent and fair for all schools. The sanctions are yet to be determined, whether immediate suspension, the length to be determined, or immediate suspension for a month, or immediate suspension for so many games. We have not decided that. Or probation the first time.

Contract with a member institution lab to help decrease costs, and we estimate this will cost the Conference 75 to $100,000 which would be $7,500 to $10,000 per school.

I understand that this is an expensive proposition. Not all colleges throughout the country would have the financial resources to have a program such as we have in the Big 10.

I also know that there are Federal laws governing distribution of anabolic steroids, but I also know, by consulting with the Drug Enforcement Agency locally, and the FBI in Ann Arbor, that that is not priority for them.

We are presently in the midst of State legislation being contemplated on the State level which, in my judgment, will give the local police and State police agencies an opportunity to get involved.

I believe strongly that this is a serious problem that must be addressed by all of us. And I think probably the most important area in which we can do the most good is through education at the high school level. But we cannot educate properly the athletes in the high school level unless the professional football and collegiate football is relatively clean.

The CHAIRMAN. Thank you very much.

Coach Raymond.

STATEMENT OF MR. HAROLD RAYMOND

Mr. RAYMOND. Senator, it is a great pleasure for me to be here, particularly with these older coaches on my right, and one who played for me. And I would like to say that you were a fine athlete and you are getting better every year.

I think that I have been rather naive with respect to steroids. I recognize the motivation. And I somehow feel or have felt that it is something that has been going on around me and not in my own bailiwick. I think I have a number of problems with it. I think that the use of steroids is difficult to detect. I do not think you can do it visually.

We talked here earlier this morning about the 1949 football team that had an offensive line that averaged less than 200 pounds. The football team that Joe Purzycki was part of and captain in 1969, had a line average of around 220 pounds. Our current football team is somewhere around 260, and still, as I say, I am naive, I question whether or not steroids are being used at the University of Delaware.

However, I must assume that if there is a particular percentage of it that is going on nationally, that it is possible that we would have a slice of the pie.

I am concerned about testing. I hear things today of false positive and false negative testing. I know this is a very expensive proposition and very sophisticated. I also hear numbers like 6 percent of football players in the NFL that are using them. They go all the way to 75 percent. So I am really on the fence about testing.

I do think that the big question, the first move that we should make is education. I think that a committed athlete today would consider anabolic steroids if he is given only half the story. And I think that our first responsibility is to explain exactly what steroids are, what they do, and the consequences involved.

We have adopted a drug education at the University of Delaware that requires each athlete to attend two drug sessions per his or her sport. And we now have a program where the coaches will be involved in a 7-hour program at the end of the school year.

We have a conference testing program that is in alliance with the NCAA testing program. And I for one would like to do anything possible to eliminate the danger to our young people and to our sport. I must say, however, that I am concerned about the problems of testing.

The CHAIRMAN. Thank you.

Coach Purzycki.

STATEMENT OF MR. JOE PURZYCKI

Mr. PURZYCKI. Senator, I would first like to thank you on behalf of James Madison University for being able to take part in what is a national forum on steroid abuse.

We are very concerned at James Madison University. So many of the conclusions that I had reached about steroids have already been very well presented today. And I would just like to summarize a few points solely from the perspective of a small college athletic studies, schools that do not have the budget to be able to test as often as they would like.

I would certainly echo Coach Raymond's sentiments about education, and everyone on the panel has talked about education. However, realizing that counseling and education do not work as well when the students believe that it is a performance enhancing drug; that we have got to make it clear to them that it is a drug of abuse. And I really feel that peer counseling could be the best way to bring that across.

I think people like Mr. Fralic and Mr. Courson, if we could get those type of people, to have the NCAA bring those people on national advertisements and television to reach the youth of today, I think we would be very successful in making some headway educationally.

Let me just say I stand firm on a viable testing program. And if there is one thing I could add to the forum, that regardless of your level of football, Division III, II, I-AA, it transcends labels. You have to do something in your own realm about steroid abuse.

At James Madison, it costs us $86 to test one student for steroids, and that is a lot out of a small budget. However, there are alternatives. If I could just mention Youngstown University in Youngstown, OH, has what they call a zero cost program. They simply solicit the money from the business community in Youngstown. Jim Tressle, their football coach, tells me that the budget for the testing is greater than the budgets of their recruiting which shows their emphasis, but they are doing it, and they have got one of the best models in the country.

A few of the 608 eligible institutions realize that the NCAA will test your students for anabolic steroids at no cost to the institution. At James Madison, we used the NCAA model as a set-up program in February of 1989. However, in 1988, only 25 of the 608 schools eligible for this service inquired about it. And I think we have got to get that message to more people.

I have enclosed a lot of literature on testing programs that I think can help. But, in the end, one of the things I just wanted to add to all this testimony, while everyone is clamoring for random testing in the NFL level, we should be pushing for the same thing on the NCAA level. Random on campus testing is needed to, as previously mentioned, send a strong message to student athletes that steroid abuse is a significant problem that needs an equally significant response.

All of us as football coaches tell our football players that there are geometric constraints to this game; that every time we walk on it, it is fair for all of us. And it is obvious that it is not fair. As Billy Fralic pointed out again and again, when somebody has a chemical edge, I think it is eroding the value of athletics.

After hearing everybody today, I am not sure if society in this case is corrupting athletics or if athletics is corrupting society. But I know all of us have to do our part. And we as football coaches on all levels cannot put our head in the sand and think that is does not exist at our level. In fact, it does.

Thank you, Senator.

[The statement of Mr. Purzycki follows:]

UNITED STATES SENATE

COMMITTEE ON THE JUDICIARY

HEARING ON ANABOLIC STEROIDS

MAY 9, 1989

JOE PURZYCKI

JAMES MADISON UNIVERSITY

HEAD FOOTBALL COACH

I would like to thank Senator Biden and the Senate Committee on the Judiciary for allowing me to appear before you today on behalf of James Madison University. I will address the steroid issue from the perspective of the 504 colleges and universities in the NCAA today who are not involved in football at the IA level. (104 schools).

It has been conclusively documented by now that the use of anabolic steroids is touching athletes at every level of football. If statistics and anecdotal information are accurate the 50,000 young men who participate in collegiate football in Divisions IAA, II and III, are equally at risk with their major college counterparts for abuse of steroids.

Young men playing football today are receiving a mixed message from society, and they are deciphering the message with a singular end result in mind. Performance over perseverence. The twentieth century win at all costs mentality has incarnated itself in the form of young athletes feeding off a 100 million dollar black market in anabolic steroids.

As football coaches and educators we have a clear responsibility to share in the blame for this epidemic, but more importantly, it is our responsibility to help clean it up.

I would like to share with you today the problems inherent in addressing this issue on the small college level and make some recommendations for eradicating steroid abuse in college football today.

I. ELEMENTS FOR ELIMINATION OF STEROID USE AT THE SMALL COLLEGE LEVEL

A. Education - Start with the coaches. At present we are lacking in expertise. We are fighting a war without the weapons needed to win. Coaches need to become experts at recognizing the signs of anabolic steroid abuse.

B. Players - A comprehensive educational model with peer involvement will succeed. Save the slogans and posters; research shows they have little impact. Former players or peers discouraging steroid abuse will work.

C. Strength Coach and Trainers - Like coaches these men must become experts on these subjects. Train them and allow them, as with coaches, to counsel and communicate with athletes when they recognize problems.

D. Team Doctor - Your best resource for information and medical assistance is the team doctor. Involve the team doctor in the educational process of all parties involved.

II. A VIABLE TESTING PROGRAM

A. Cost - The primary problem of small college programs is affording the exorbitant cost of steroid testing. At James Madison it costs us $86 to test one student for steroids.

B. Two Models to Reduce Cost:

1. Youngstown Model - Youngstown University (Ohio) has a zero cost program which simply relies on community sponsorship.

2. NCAA On-Campus Testing - Few of the 608 eligible institutions realize that the NCAA will test your students for anabolic steroids at no cost to the institution. At JMU we used the NCAA model as a set-up program in February of 1989. In 1988 only 25 of 608 schools used this service, and in 1989 only 63 of 608 schools requested consideration for the NCAA program. We need to get the message out to small colleges that this service is available.

3. **Testing** is the most efficient tool we have at present to combat steroid use. For universities with limited funding there are two basic models that can be employed which are both effective and cost efficient in detecting steroids.

a. **JMU Model** - Random and unannounced drug testing. The JMU model relies on the presence of drug testing to deter our student-athletes from usage. The philosophy here is to give the athlete a reason to say no. (JMU model attached).

b. **Youngstown Model** - Reasonable suspicion program. In the Youngstown model, everyone in the program is presumed innocent unless inconsistencies in appearances or statistics are present. This program is received more readily by civil rights groups because it is based more on our system of law. The key in the Youngstown model is having people with exceptional expertise to monitor criteria carefully. Every big person who participates in your program is not a candidate for testing. In fact, research shows the slighter or smaller athlete is the one most often abusing steroids to compensate for his shortcomings. Rapid increase in size and strength, acne, testicular atrophy, and personality changes are the key criteria to be monitored. The drawback with the Youngstown model is the "Witch Hunt" effect which endangers young men if you have over-zealous untrained people implementing your program. Expertise is once again critical. (Youngstown model attached).

III. **MORAL AND ETHICAL MESSAGES FROM ROLE MODELS AND INSTITUTIONS** - Unless the messages reaching these young people change, all of our efforts will be wasted.

A. **NFL** - In the 1989 draft two players, who tested positive for steroid abuse, were drafted in the first round. This signals a green light mentality for young people, so many of whom aspire to the big leagues.

B. The penalties for cocaine abuse and steroid abuse in the NFL are treated the equivalent of a felony and a misdemeanor. Every young player we've spoken to is aware of this unequal standard.

C. **College Football** - High school coaches tell us that young sixteen and seventeen year old kids are getting the idea they have to be bigger and stronger to compete for college scholarships. We in college football have to change the message, however unintentional, that football is a game of over-sized gladiators.

D. **Federal and State Governments** - The present division of the street drugs as drugs of abuse and steroids as a prescription drug and performance enhancer must be severed in the eyes of the public. Laws must be enacted which are suitable to the control of this drug. Making anabolic steroids a classified drug much the way we did with amphetamines in the 70's would send a message that this is a drug of abuse. Stricter provisions for illegal possession of prescription drugs and curtailing the supply side of black market steroids is where the federal government can help most.

E. **NCAA** - In 1985 the NCAA recommended on-campus year-round testing for member schools. This policy was rejected by the membership. The present NCAA Testing Program restricts itself to championship events which reaches only a fraction of the participating members. Random on-campus testing is needed to, as previously mentioned, send a strong message to student-athletes that steroid abuse is a significant problem that needs an equally significant response. Frank Urias of the NCAA Drug Education Committee favors this policy and considers it "very feasible and the most effective way of testing." Coaches I have talked to on this subject want strict sanctions imposed for players and programs that are in continual violation of substance abuse.

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In summary, we have a massive and serious problem on all levels of college football, and those of us in small colleges can't put our heads in the sand and pretend it doesn't exist at our level. In fact, it does. Comprehensive educational programs should be mandatory at all NCAA schools to help combat this problem. Testing is needed and those of us at the small college level can creatively finance this effort or we can seek grants from outside agencies to initiate our programs. And finally, all effected parties must work to change the messages which effect the mindset of the youth who are going to dangerous extremes to reach success at all costs.

ATTACHMENTS

I. JAMES MADISON UNIVERSITY

II. YOUNGSTOWN UNIVERSITY

JAMES MADISON UNIVERSITY

SECTION V

DRUG SCREENING AND EDUCATION PROGRAM

The Department of Athletics at JMU, its coaching personnel, physicians, athletic trainers, and administrators, strongly believe that the use of drugs (excluding those drugs prescribed by a physician to treat a specific medical condition) can be detrimental to the physical and mental well being of its student athletes, no matter when such use should occur during the year. Additionally, use or abuse of drugs can seriously interfere with the performance of individuals as students as well as in athletics and can be extremely dangerous to student-athletes and their teammates, particularly when participating in athletic competition or practice.

In light of this, the Athletic Department at the University, beginning with the 1988-89 academic year, and for subsequent years thereafter, will implement a mandatory program of drug education, testing, and counseling/rehabilitation efforts to assist and benefit the men and women athletes at JMU.

Purpose of the Program

The purpose of the JMU Intercollegiate Athletics Drug Screening and Education Program is to aid and assist the student athlete at the University. This program is based on the Athletic Department's policy that drug use or abuse is detrimental to the student and a violation of team rules. Specific goals of this program are: (1) to educate JMU athletes concerning the associated problems of drug use and abuse, (2) to discourage any drug use or abuse by JMU athletes, (3) to identify any athlete who may be using drugs and to identify the drug, (4) to educate any athlete so identified regarding such usage as it may affect the athlete and his or her team and teammates, (5) to provide reasonable safeguards that every athlete is medically competent to participate in athletic competition, and (6) to encourage discussion about any questions the athlete may have either specifically or generally, about use of drugs.

Implementation of the Program

At the beginning of the academic year a presentation will be made to all intercollegiate athletes to outline and to review the intercollegiate athletics drug education program, its purposes and implementation. A copy of this program will be given to each student athlete. Each athlete will be asked to sign a form prior to participation acknowledging receipt and understanding of the program and provide consent to the administration of the urinalysis testing required by the program and permit releases of testing information to a limited group.

It is hoped that no athlete has a problem with drug abuse; however, drugs have touched practically all occupations and age groups, with some exceptionally respected persons found to be abusers. Screening, if for no other reason, should enhance the feeling of trust among athletes and teammates.

The Drug Screening Program

Athletes will be randomly and regularly tested during the academic year for substances which may include, but are not necessarily limited to the following:

Amphetamines
Barbiturates
Cocaine
Methaqualude
Opiates
Morphine
Codeine
PCP (Angel Dust) and analogues
Tetrahydrocannabinol (THC or Marijuana)
Anabolic Steroids

Individuals who, in the judgment of the team physician, exhibit behavior that is symptomatic of drug usage may be independent of the random sample. Furthermore, all members of teams participating in NCAA sanctioned, post-season competition, or individual team members participating in such competition will be tested prior to competition. Those who at any time experience a positive test can expect further screening to be done on a more regular basis. For the athletes' and teammates' safety every athlete whose test is positive must be retested to obtain medical clearance before participation in a practice session or competition.

The drug screening shall consist of a collection of a urine specimen from the athlete under the supervision of the team physician or a certified athletic trainer. Each urine sample shall be analyzed for the presence of drugs by an accredited agency contracted by the University to provide this service. Each athlete's sample will be identified by code rather than by name, and the code and all records relating to testing will be kept in a safe place. The outside agency analyzing the samples shall report all test results to a team physician (within 24 to 48 hours) who in turn shall note which, if any, of the test results are positive. For purposes of this program, a positive result is one which indicates, in the opinion of the outside agency performing the testing, the presence of one or more of the previously listed drugs in the athlete's urine.

Steps will be taken to maintain the accuracy and confidentiality of the test results, including maintaining a documented chain of specimen custody to establish the identity of the sample throughout the collection and the testing process.

The provisions of this program are subject to change, but only through formal action by the Athletic Director. Such changes will not be applied retroactively.

Effect of Positive Test Results

Each athlete will be immediately and confidentially notified by the team physician if the test result is positive. Every athlete with a positive result must be retested prior to a participation in practice or an event to ensure that he or she is medically fit to participate. The athlete has the right to challenge the test result, and may request a conference to present his or her side of the story to the team physician. If the student continues to dispute the result, the student may appeal to the Athletic Director by submitting a statement setting forth the reasons for disagreement.

Drug use will be deemed a violation of team rules. A positive test result will have the following consequences:

A. First Positive. During the athlete's four year NCAA eligibility, the first positive test will be discussed with the student by the team physician and the physician will notify the Director of Athletics, the team coach, and additionally, if the athlete is a minor, he or she will participate in a conference call between the athlete, the athlete's parent(s) or legal guardian(s), and the Athletic Director wherein the parent(s) or legal guardian(s) will be advised of the positive test results. The student will be required to attend a mandatory drug education session at the Student Health Center. The Health Wellness Coordinator shall determine in consultation with the Counseling Center, the length and manner of counseling to best suit the athlete. Every athlete with a positive result will be suspended from practice and competition and must be retested and be negative on retesting prior to participation in practice or a game.

B. Second Positive. During the athlete's four year NCAA eligibility, if a student's second test is positive it must be assumed that the athlete has a very significant problem or has made some conscious value judgments as to his or her behavior. This information will be shared with the team physician, the student's coach and the Director of Athletics, as well as the student's family, if appropriate. The second offense will dictate a permanent suspension of the student from

practice and athletic competition, and any athletic grant-in-aid will be terminated at the end of the semester in which the test occurs. Prior to suspension the athlete will have the opportunity to discuss the matter with the Athletic Director and present evidence of any mitigating circumstances which the student feels important.

Conclusion

It is believed and hoped that implementation of this JMU Intercollegiate Drug Screening and Education Program will serve to benefit all individuals connected with intercollegiate athletics at the University. Further, we believe that participation in this program will make the men and women who participate in athletics at the University and who represent the University in various areas of athletic competition, better students, better athletes, and better able to make individual, informed and intelligent decisions with reference to drug usage, both now and in the future.

DRUG EDUCATION AND TESTING PROGRAM

Youngstown State University
Department of Intercollegiate Athletics

The Department of Intercollegiate Athletics of the Youngstown State University firmly believes that the use of drugs and alcohol can have a negative effect on the performance of the student-athlete, both in the classroom and in sports. This program is designed to deal with this critical area.

A. Purpose of Drug Testing

Although educational efforts will continue to be a major thrust of the department, a program of testing of the urine of student-athletes will be undertaken as an adjunct to this program. The purpose of drug testing is as follows: 1) To serve as a deterrent to drug or alcohol use by the athlete; 2) To identify athletes who are addicted to substances; 3) To promote education and arrange treatment for the athlete who needs help; 4) To protect the integrity of Youngstown State University.

Every attempt has been and will be made to protect the rights of the individual student-athlete and the institution.

B. Method of Drug Testing

Student-athletes shall be informed about the drug testing program. A copy of this program will be given to the student-athlete and a copy sent to each parent or guardian.

The Team Physician shall explain to the members of each squad being tested the procedures of the drug testing program and answer any questions. A consent form for testing of urine samples and authorization for limited release of information shall be given to each athlete to sign.

Tests will be primarily conducted for drugs of abuse, such as amphetamines, cannabinoids (substances contained in marijuana), cocaine, and other controlled substances. They may also include procedures to detect anabolic steroids and other so-called performance enhancing drugs. All tests will be performed on urine.

The testing may be announced or unannounced. Urines will be collected by professional personnel and will be numbered. The trainer will match the individual player with a master list that is prepared so that the signature of the athlete will correspond with the number on the specimen bottle. The specimen will be transported to the clinical laboratory where the director of the laboratory will proceed with the testing. The master list of numbered urines will be given to the Head Team Physician. He and he alone will know identification of the individual athlete. Refusal to provide a urine specimen will be considered a positive test result.

C. Dealing with Positive Tests

If the results of the urine tests are positive, these results will be given to the Team Physician by number. The Team Physician will inform the athlete of the presence of a substance in his or her urine. The Team Physician will advise the athlete of the nature of the substance and the health hazards involved.

The Team Physician will collect a second urine sample which will be analyzed by a second laboratory and confirmed by the laboratory if positive. Anabolic steroids and Group C drugs are excluded from this procedure.

Drugs banned for use by the student-athlete will be divided into three categories. Sanctions will be divided into three categories. Sanctions will be imposed differently in each of these groups.

Group A

Marijuana and Hashish (THC). (Street names: grass, pot, weed, tea, Mary Jane).

Group B

Stimulants--Amphetamines, Ritalin and related compounds. (Street names: uppers, pep pills, bennies, dexies, speed).

Depressants--Methaqualone, barbiturates, diazepams and related compounds. (Street names: downers, stumblers, ludes, sopors, red devils, yellow jackets and rainbows).

Hallucinogens--LSD, PCP, mescaline and related compounds. (Street names: acid, scramblers, mind benders).

Anabolic Steroids--Winstrol, Dianabol, Deca-Durabolin and related compounds.

Group C

Cocaine and heroin.

Sanctions to be imposed in the case of positive tests are as follows:

Group A--THC

Group B--Stimulants, depressants, hallucinogens and anabolic steroids.

1. Probation. The positive individual will be unable to start or travel for one contest immediately following positive test findings.

2. The Head Coach will be informed of the results of the test.

3. The Team Physician will discuss the positive test with the student-athlete. If the athlete admits to a problem with substance he/she will be referred to a drug counselor. If the athlete refuses counseling or denies a problem with the substance, urine tests will be instituted and continued for the remainder of his/her career. Those athletes going directly to counseling will also be tested.

Second Positive

1. Suspension of sport-related activities but not study table or conditioning program until a negative specimen is collected.

2. Evaluation by a Drug Counselor and regular attendance to whatever program is suggested.

3. Reinstatement can be considered after a period of time but must be approved by the Head Coach, Team Physician and Director of Athletics.

4. Weekly drug tests for the remainder of the athletic career.

Third Positive

1. Removal from the squad for a minimum of one year. Financial aid may be continued as long as the athlete follows certain guidelines (attendance at class, continued drug testing and continued drug counseling).

Group C--Cocaine and heroin

First Positive

1. Suspension of sport-related activities but not study table or conditioning program until clean.

2. Evaluation by a Drug Counselor and regular attendance to whatever program is suggested.

3. Reinstatement can be considered after a period of time but must be approved by the Head Coach, Team Physician and Director of Athletics.

4. Drug tests for the remainder of the athletic career.

Second Postive

1. Removal from the squad for a minimum of one year. Financial aid may be continued as long as the athlete follows certain guidelines (attendance at class, continued drug testing and continued drug counseling). If unable to prove "clean" for the entire year--**EXPULSION.**

Any athlete who does not report regularly for testing or misses a counseling session will be subject to suspension or dismissal. It is possible that a formal drug rehabilitation program (in-patient) will be recommended for the athlete. The Athletic Department will encourage and be supportive of the student-athlete's participation in appropriate drug treatment but will not assume financial responsibility for this treatment.

We strongly urge that parents avail themselves of the University Insurance program which assumes some of the expense for illness and injury not athletically related.

The Department of Intercollegiate Athletics will make every effort to keep test results confidential except as provided above and will oppose disclosure thereof to any persons within or outside the University.

D. General Principles

1) As a required condition for any student to be a member of a Youngstown State University varsity intercollegiate athletic team, he/she must agree to participate in the Athletic Department's Drug Testing Program. Such monitoring is considered an extension of the ongoing physical examination of our athletes and is in the best interests of both comprehensive Drug Testing Program.

2) Multiple testing may be done with each athlete.

3) All positive test results are considered cumulative for the career of the Youngstown State student-athlete.

4) Any student-athlete found guilty of selling any drug to any other student-athlete shall be immediately and permanently terminated from the squad and his/her athletically related financial aid (if any) shall be revoked.

5) Any drug not specifically listed on the penalty chart is subject of classification by the team physician for inclusion on the chart.

Any exception to the above regulations must be authorized by the Director of Athletics.

-All varsity teams will be tested.
-Multiple testing may be done with each athlete.
-Tests will be unannounced.
-Tests conducted throughout the year.

Drug Categories for Sanctions

Group A--marijuana and hashish (THC)
Group B--stimulants, depressants, hallucinogens, anabolic steroids
Group C--cocaine and heroin

Sanctions--Group A and B

First positive--probation--unable to start and travel for one contest immediately following positive results findings.

Second positive--suspension from team.

Third--removal from team.

Sanctions--Group C

First positive--suspension from team until proven clean.

Second positive--removal from team.

Other Requirements

- If positive, the athlete will be tested for remainder of career.

- Positive tests cumulative for a career.

- Student-athlete found guilty of dealing in drugs will be terminated from the program.

The CHAIRMAN. Thank you.

The reason why I asked all of you to be here, is I think you represent not only the various divisions in football, from the largest to one of the smallest, but the trade of winning. And all four of you are here saying, as winners, that you in fact do not think steroids are legitimate in terms of their use for your athletes.

But one of the things that I would like to move to, if I may, and I do not want to keep you too long, is the case of Brian Bosworth back in 1986. He was drafted by the Seahawks and signed to a multimillion dollar contract after it was clear and acknowledged that he was using steroids.

As a matter of fact, one of your colleagues, Barry Switzer, was quoted as saying, in December of 1986, "I talked to him in January about the new rule, at the Miami Airport news conference, and I knew they took steroids to be bigger and stronger."

I am not trying to pick on Oklahoma here. But I use it as an example because it is far enough in the past and it was "a new rule" then.

But are you fellows representative of the coaches in NCAA football, or are you the exceptions in terms of your attitudes about the use of steroids?

I am not looking for anybody to name names, but I mean is this concern one that is unique or do you think your colleagues share your view?

Mr. SCHEMBECHLER. I would say that there are a lot of coaches in the NCAA that would support our position. There might be some that would think it is not that serious a problem, and they are probably the same guys who do not conform to the rules in recruiting and otherwise, you know.

But I think the vast majority of coaches in the NCAA want to see a stop to the use of anabolic steroids.

Mr. PATERNO. And I would agree with that.

The CHAIRMAN. Does anyone disagree with that statement?

You know, there has been a good deal of discussion among your colleagues not just in football, but in all NCAA sports, about academic eligibility and academic requirements.

I wonder why this problem should not be equally as important to the NCAA as academic requirements? Is there a sense that this is escalating to that point, so that it is becoming more important with the governing body, the NCAA, in terms of the extent to which it is debated and discussed and what roles should be put in place? Or is it just that it has not hit the front burner yet, like academic irregularities did?

Mr. PATERNO. Well, I think that is accurate. I think that we are finding out right now that there is a much bigger problem than we realized, maybe 4 or 5 years ago. At least I can speak for myself to that point.

Steroids were things that some of the younger coaches on my staff would mention that they were suspicious of some people we were playing against. Their kids were using steroids. I never really felt that it had an impact on the outcome of the game.

But that was before it got down into the high school level. We are now finding ourselves with a disease that is spreading, and it bothers me that if it becomes so prevalent in high school, then ob-

viously it is going to be a bigger problem for us and eventually going to be a bigger problem for the pros, although I think that the pros really got this whole thing started.

The CHAIRMAN. You have been very outspoken in your attitude, Coach Paterno, about college football being undermined by poor academic performance. Those who go to school and take noncourses in effect, et cetera.

Does this problem have the potential to undermine the strength of college football in the public's mind?

Mr. PATERNO. Absolutely. But even more importantly, it is what it does to the experience of playing this sport.

You know, it is easier to handle the academic situation than it is this, because your faculty should help you with the academic. And they ought to have enough courage in autonomy in their own classroom that they give a kid a legitimate grade and you ought to have faculty reps and other people involved who could help you, that makes your kids making normal progress toward a degree with quantity work as well as quality work. And the kid that gets a D, gets a D.

It is a whole lot more difficult to handle the steroid problem on an institutional basis or on a national organization basis because we are really not sure what we are dealing with.

As Tubby mentioned, you hear 6 percent in the pros, you hear 50 percent, you hear this, you hear all that.

We are just now starting to get a feel for this problem. And there is no doubt in my mind, as far as a person who believes that there are some benefits to be gotten out of inter-collegiate athletics, regardless of which sport it may be, I feel that if it gets to the point where we have chemical abuses in order to be able to compete and compete successfully, I do not think that is a game I want to be involved with. Because I do not think that we are going to do very well by our young people, at particularly the time in their lives when we should be developing some values and some ethics and some sportsmanship and fair play that we obviously are seeing in our society diminishing all the time, whether it is in Wall Street, or wherever it may be.

So I think that, yes, I think it is a very serious problem.

The CHAIRMAN. In the past, Coach Paterno, you have been coach to one of those teams which I followed the most, next to my two alma maters, Delaware and Syracuse. We are always rooting for, at least I am always rooting for, the east. No offense, Coach Schembechler.

And so I followed you a lot and I have great admiration for you.

You have been one of those folks who talked about not pushing ball players too early because you thought it may, if I understand you correctly, interfere with their academic start in college.

And let me ask you this question. Has the eligibility of freshmen being able to play increased pressure for the best—I mean there is no way you would know for sure—but increased pressure in high school to step in ready in terms of bulk size and the rest to play?

Mr. PATERNO. I think there has to be some of that in it. I, as you know, feel we should make freshmen ineligible.

The CHAIRMAN. That is why I asked.

Mr. PATERNO. I very strongly feel that way. It would give us another year to kind of get to know them a little bit and keep them away from the pressure. I am sure that is not a consensus here, even among the four of us.

But I think anything that could reduce that type of pressure would obviously help. But I do not know how you are going to do that. Sooner or later, sophomores or juniors, or sometime in their career, they are going to want to go out there and prove they are better than the other guy. And you hope that the other guy is in there playing the game with the same rules that your guy is playing with and, unfortunately, we do not have that right now.

The CHAIRMAN. Coach Schembechler, you know, the Big 10 is the Big 10.

With the exception of Joe Purzycki, the remaining three of you have been—and I am not being solicitous—have been great coaches for a long time. All young men I acknowledge, but for a long time.

And is it something—this use of steroids—that has kind of crept upon you all, and you in particular, or is it something that you saw coming? I mean the fact that you have been coaching in an era and winning in an era when it obviously was not as prevalent, did it take you and some of your coaches longer to figure out what was going on? Do you understand my question? I think you do very well.

Mr. SCHEMBECHLER. I think you are right. You know, in the sixties, we never thought about street drugs. We were most concerned about alcohol, because I do not know of anybody that ever played for me that used drugs. And then, all of a sudden, in the seventies, we got into the drug business and became very concerned about that.

And in my judgment, in my program, we controlled the street drugs, but we only did it through testing. I do not believe that we could have done what we have done without random testing.

And now the steroid thing has been brought to light. And the more you read about it and study it, you can see it is a very serious problem for these young people, and one of these that you are not going to see the ramifications of it right away. It is going to be 10, 15, 20 years from now when some of these health problems will arise. And so you get concerned about that.

I have also played teams that I thought were steroid teams. And frankly they were a little bigger, a little stronger, a little faster, a little more hostile than we were. And I though that was unfair competition. I did not like it at all because I did not think we were playing by the same rules.

If you are worth a nickel as a coach, you have got to be concerned about the welfare of the people who play for you. And if you are that kind of a coach, you are certainly going to be concerned about steroids. And so I am trying to do everything that I can.

The CHAIRMAN. Coach, Senator Specter raised in another panel this question of hostility, and you have used the word several times. And every school has a different way to try to instill some hostility in a sense. I do not know how many times you heard from Nelson and Raymond, different phrases, poisoned concentration on offense, tiger on defense. Different people have different ways of saying different things which mainly says when you are on de-

fense, throw your body with reckless abandon and other Raymond phrase. I am sure you all used different phrases or maybe similar phrases.

But the point is that there is this need to be aggressive. I mean that is part of it, to get psyched up when you go out there.

And everyone of us have stories, and you have thousands of them, I am sure, about the guys who do everything from smash their helmets against the lockers to their heads against the lockers before they go out and all that kind of stuff.

But this notion of hostility, from what we understand, from what I understand, there is a correlation between steroid use and behavioral patterns at the time steroids are being used.

Your physicians who advise you, do they tell your trainers or other what to look for?

Mr. SCHEMBECHLER. I think it has been pretty much established that steroids are mind-altering drugs, and that they do cause greater competitiveness, if you want to call it that rather than hostility.

I am going on the basis of what, in my judgment, medical people have said, and from just watching in competition against some athletes that I think suddenly gained 30 or 40 pounds since I last played against them. And where they were a nice competitive player before, they were extremely aggressive and hostile the next time I played. And I am always suspicious about that because I do not know whether they developed that competitiveness in one year's time.

So I believe that, in my judgment, the answer is yes, it does create an environment of hostility in a player.

The CHAIRMAN. You have all coached boys and men, and you probably, I suspect, collectively know more from practical observation about how boys and men who compete in sports work.

Coach Raymond, is it likely in your experience of thinking back to all the folks you have coached, that you are going to have somebody who is not real crazy about hitting in one year to come back and, all of a sudden, devour it, love it? I mean, does that happen often?

Mr. RAYMOND. I would take a very dim view of that unless——

The CHAIRMAN. Unless you had him for the year?

Mr. RAYMOND. Of the effect of steroids psychologically.

I told you at the beginning that I am naive and I need education. I want to hear everything I can about it.

But my feeling is that the hostility is related to the fact that this athlete has better equipment now. He is bigger, stronger, and this not only encourages him——

The CHAIRMAN. I see. It is easier to be hostile when you are 300 pounds.

Mr. RAYMOND. Yes. And it also encourages them to lift weights and to do other things.

The CHAIRMAN. I see.

Mr. RAYMOND. But I think there is a psychological set that goes along with it.

The CHAIRMAN. Notwithstanding your indication that you need to know more, if you saw a fellow between his junior and senior year, coming back over the summer after spring ball, and showing

up for preseason, those wonderful double sessions, 25, 35, 40 pounds heavier, would you wonder about that? Is that something——

Mr. RAYMOND. I think I would wonder about it now. To be very honest about it, I do not think 2 or 3 years ago, I would have.

The CHAIRMAN. Joe, obviously you know James Madison is a fine school, and the football program you are really building is no Penn State or Michigan. But is the attitude of these kids that you coach, any different than the guys you played with when you were playing ball or that you coached at Delaware State? I mean is an athlete an athlete regardless of what level that athlete is playing at?

Mr. PURZYCKI. I really believe the mentality is the same at our level, even though the odds of probably playing at the next level are much further removed. I still think the mentality of young people is they all aspire to play at the next level.

And so the mentality is, I think, the same as the I-A athlete. And I think it is the same even at levels down to some extent.

The CHAIRMAN. Do you think that one of the reasons your athletes do not object to the—I may be wrong about this—testing program is that they want to prove that they are clean?

I mean is there any part of that mentality that any of you have seen out there that is a little bit like the little guy sitting behind you, at 285, who wants to prove that he is clean in order to make sure that the others have to prove it too? Is there any of that?

Mr. PURZYCKI. I will just relate a quick anecdote to you and it is only one individual.

But before we implemented this testing in February, I had a big fellow on our team, just one of the bigger fellows I will leave it that, who came in to me and said, Coach, I do not take steroids. I have been harassed by our—you know, harassed in a good way—by our strength coach, by our assistant coaches. I go into class and I get accused of being a roid user. He said I would welcome your program because, in a climate where there is drug testing, at least in the community you are in, you have somewhat of an endorsement of being drug free.

And so I found that our players welcome the idea and the concept of a drug free program.

The CHAIRMAN. Well, I yield to Senator Specter with this closing comment.

One of the things that got me interested in this whole steroid issue, and why I started to set up these hearings, is that steroids have become common knowledge even at the local racquet ball clubs.

And the young women and men who play at the local clubs know about steroids although I am not suggesting they use them. Everyone talks about roids. Like you, I did not know what the heck they were talking about at first. It is not the total topic of conversation.

But any time that it becomes common knowledge in a community of people that there are things called anabolic steroids, and they talk about who uses them and who does not use them, it says to me that this thing is not a minor problem. It is a big deal.

And I appreciate you all coming to testify. But I will yield to my colleague from Pennsylvania.

Senator SPECTER. Thank you, Mr. Chairman.

I am interested to know if it was at a racquet ball locale that Senator Biden got his impetus for this hearing? I have been trying for 6 years to get him to play squash.

The CHAIRMAN. Well, I did not go to an Ivy League school so we always played racquet ball. [Laughter.]

My son is going to be the squash player.

Senator SPECTER. This is the only subject on which Senator Biden and I have disagreed all day. You do not have to go to an Ivy League school to play squash. All you have to do is report sometime in the day, preferably early, to the Capitol Hill Squash Club where, for a few bucks, you can play squash. I got him a racquet.

I join my colleague, the Chairman, in thanking you for coming today. And I think it has been a very good hearing. And in view of the lateness of the hour and the comprehensiveness of the questioning, I need not take too much time.

I infer from the testimony that nobody has raised a legal issue to the testing of the college students. Nobody says it is a deprivation of constitutional rights to ask college students who want to play ball to take testing for steroids?

Mr. PATERNO. Well, there was a case out on the coast. Stanford, there was a young female swimmer at Stanford, I believe, who went to court, and the judge enjoined the university to stop testing.

Senator SPECTER. And they did stop the testing?

Mr. PATERNO. And they stopped testing.

In our situation, when we recruit a youngster, we tell him we are going to test him; that at whatever time and place we want to test you as many times and what have you. And when they come in, they sign a statement that they will join in the testing program.

Senator SPECTER. So they do actually sign a statement?

Mr. PATERNO. That is true of all 800 athletes we have at Penn State. I mean in all sports.

Senator SPECTER. Well, I suppose, in a sense, somebody could raise a constitutional issue, even after an agreement but, at any rate, nobody has.

Mr. PATERNO. Well, we have a Supreme Court ourselves, which is very convenient. We do not have to play them. [Laughter.]

Senator SPECTER. Let me just ask one question on a related subject, if I may, Mr. Chairman, having taken so little time on this subject.

The CHAIRMAN. Please.

Senator SPECTER. Coach Paterno and Coach Schembechler appeared here several years ago in the wake of Herschel Walker's recruitment by the National Football League, and I had asked both earlier today if any recurrent problems were on the horizon from the NFL to the colleges? And I would like to get their updated views for just a moment or two since they are here today.

Mr. SCHEMBECHLER. I really do not think the situation has changed much. I do not consider that a serious problem in college football because there are very few that pass up eligibility in order to go to the pros.

As a matter of fact, the last football player that I lost, who had eligibility remaining, left my program to go to Harvard Law School.

So there are circumstances, whether it is the NFL or whether it is a law school, or whatever it is, that we may lose a player with eligibility remaining.

Senator SPECTER. He had graduated from the undergraduate school?

Mr. SCHEMBECHLER. Yes, he graduated. He had another year of eligibility. He could have played for us. And he was our leading receiver.

Senator SPECTER. Well, do you lose many players with eligibility to the pros through their recruitment practices?

Mr. SCHEMBECHLER. I think over my 20 years at Michigan, I have lost three. That is all. And all of those were fifth year players, not four.

Senator SPECTER. How do you see the issue now, Coach Paterno?

Mr. PATERNO. Well, I feel as Bo does, it is not a big problem for us. I have had people, as Bo has had, I have had two players who were first round draft picks who graduated, Mike Munchak and Todd Blackledge. Both graduated within 4 years, and were going to come back and do graduate work and still play. And we recommended that they go because they were going to be number one draft picks, and they could do their graduate work a little bit later.

So I think that as long as we keep a perspective, that we are there to help a youngster get what he wants to get out of our institution, what he wants to get out of our football program, we will be okay. I think it is when—I just do not think it is a real problem. Even the Sanders situation at Oklahoma State, I think that they all got together and agreed that this was in the best interest of the young man.

He was good enough to become a professional football player. It just seemed to be the natural thing to do, as I felt that the Herschel Walker thing was at the time. So I do not think it is a big problem.

The other problems we have talked about this morning really go very deep to the character of our game. I do not think this does. I think this is something that an individual youngster makes that decision based on his own preference.

Senator SPECTER. Thank you very much. And Coach Raymond, Coach Purzycki, do you have anything to add on that subject?

Mr. RAYMOND. I do not envision that as a problem today or tomorrow. I really think that the NFL is very much concerned about our situation, and would be very responsive to problems that we have.

Senator SPECTER. Thank you.

Mr. PURZYCKI. Again it is not quite as big a problem on our level. They are not tampering too much with players from I-AA and down. I think it is more the problem of the I-A coaches.

Senator SPECTER. Thank you all very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Gentlemen, you have been kind with your time, and good with what you do. I appreciate you all coming.

Thank you very much.

This hearing is adjourned.

[Whereupon, at 1:55 p.m., the committee adjourned, subject to the call of the Chair.]

APPENDIX

AMERICAN MEDICAL ASSOCIATION

535 NORTH DEARBORN STREET • CHICAGO, ILLINOIS 60610 • PHONE (312) 645-5000 • Fax (312) 645-4184 • Telex 28-0248

JAMES H. SAMMONS, M.D.
Executive Vice President
(645-4300)

May 18, 1989

The Honorable Joseph R. Biden, Jr.
Chairman
Committee on the Judiciary
United States Senate
224 Dirksen Senate Office Bldg.
Washington, DC 20510

Re: Abuse of Anabolic Steroids

Dear Chairman Biden:

Thank you for this opportunity to restate the position of the American Medical Association concerning abuse of anabolic steroids. Please include this letter in the record of the recent hearings on this issue.

The AMA shares your concern that steroid abuse is a growing problem in the United States. Abuse of anabolic steroids is associated with a range of adverse health effects, including oligospermia; temporary infertility; gynecomastia and liver pathology, including abnormal liver function; cholestasis; peliosis hepatis; hepatic adenomas; and hepatocellular carcinoma. In addition, in some individuals, steroid abuse has been reported to cause increased irritability and aggressiveness.

While we share your concern over the consequences of anabolic steroid abuse, we do not believe it is appropriate to legislatively control steroids under the Controlled Substances Act (CSA). Steroids do have certain beneficial uses in medical practice, including the treatment of anemias, hereditary angioedema, and breast cancer. Thus, they do not qualify for classification under Schedule I of the CSA. Accepted medical research also has not shown that steroid abuse may lead to physical or psychological dependence, as is required for controlling steroids under other schedules of the CSA. Moreover, scheduling has the potential to affect only a small portion (probably less than 10%) of all the steroids available in the United States today.

The AMA maintains that the preferred and appropriate method for scheduling or rescheduling any drug is through the existing regulatory process, which utilizes the expertise of the Food and Drug Administration and the Drug Enforcement Administration. This regulatory mechanism, which is based on the review of sound scientific data, has proven to be a highly satisfactory means of evaluating drugs for almost 20 years. Use of the legislative process to schedule drugs would inappropriately preempt this well-developed regulatory program that is designed specifically to deal with scientific and medical issues.

We do, however, believe that a number of effective approaches to combat steroid abuse are available. One means involves strict enforcement of the recently increased criminal penalties for selling steroids without a prescription. These penalties, which were enacted as part of the Anti-Drug Abuse Act of 1988, should serve to deter the major source of steroid abuse — the widespread distribution of steroids through non-medical channels.

Another approach is to educate athletes, coaches and trainers concerning the very harmful health effects of steroid abuse. The Food and Drug Administration recently developed such an educational campaign.

Finally, medical organizations, including the AMA, will continue to reinforce to physicians that the prescribing of anabolic steroids for athletic performance enhancement or body building purposes is inappropriate. While we do not support the enactment of federal legislation to regulate such prescribing, we do support the right and responsibility of state medical boards to discipline physicians who intentionally misprescribe these and other drugs.

The AMA intends to continue its ongoing study of the scientific, medical and ethical issues involved in the use of steroids. We will inform the Committee of the results of our study.

We commend the Committee for focusing further attention on the important issue of steroid abuse. We urge you to consider carefully our views.

Sincerely,

James H. Sammons, MD

JHS/tmw
4935p

Robt. B. Kerr, M.D.
Sportsmedicine
316 East Las Tunas Drive
San Gabriel, CA 91776
(213) 285-1154

The use of anabolic steroids or anabolic drugs is an endeavor not to be taken too lightly. With the use of these drugs, as with all medicines, side-effects can and do occur. Before taking these drugs you will want to carefully weigh the facts and if you are aware of the possible side-effects and choose to continue with the use of these medicines then it is hoped that you will find it a successful endeavor.

Side-effects from the use of anabolic drugs could include such items as baldness, sterility, increased bone size and weight increase, liver toxicity and pathology as well as kidney pathology. A shrinking of the testes, acne, hypertension (high blood pressure) and gynecomastia (swollen, painful male nipple or nipples). Rashes could occur and a personality change is always possible. The possibility of a decreased body immunity must be considered (here an increase in the incidence of colds and infections might occur).

Science has not yet established the long-term safety of these drugs -- though the anabolic drugs have been used for many years the possibility of long-term ill-effects must always be considered as with any medicine. In regard to this, it must be asked could the ill-effect from these drugs affect you in the years to come? There is now no established record that would guarantee that the effect of these drugs will not affect your offspring. So, this must also be considered by anyone considering the use of anabolic agents.

If you have pondered the above warnings and still feel that, dangerous side-effects aside, the use of these medicines will enhance your needs then sign and have witnessed this statement. If unsure then don't take any medicine of which you are unsure!

Obviously, if you do decide to take the anabolic drugs and if signs and symptoms of any of the above (or any other) side-effect or ill-effect occurs -- please, with haste, contact Dr. Robert Kerr or his representative. Most side-effects are curable when medication and therapy is instituted quickly. Some of the ill-effects that I've mentioned above I have personally seen as side-effects in patients taking anabolic drugs. Most of the other incidences mentioned above have not been seen by me but have been reported in the Gym gossip that we all hear from various training centers. And though personally unwitnessed, these dangers must be considered.

Again, before you sign, weigh all of the known facts -- will these drugs give you your desired benefits and, if so, is the risk of side-effect worth the possible gains?

Obviously, the longer a drug is used the greater the possibility for many of the side-effects occurring.

So, report any abnormal effect or symptom immediately.

My best wishes for success.

Robt. Kerr, M. D.

Athlete's signature

Witness 3-1-84

IROPRACTIC HEALTH
AND
'ORTS CARE CENTER

AUTHORIZATION FOR RELEASE OF MEDICAL INFORMATION

To: DR. Robert Kerr
Doctor or Hospital
316 EAST Los TUNAS
Address
SAN GABRIEL, CALIFORNIA

I, DIANE WILLIAMS, hereby

Authorize and request you to release to:

Doctor VICKY VODON, D.C.
21521 BROOKHURST ST.
HUNTINGTON BEACH, CA. 92646

Address

the complete medical records, x-rays, reports in your possession, concerning my illness and/or treatment during the period from January 1984 to May 1984.

ALL RECORDS YOU HAVE IN YOUR POSSESSION
INCLUDING MEDICATIONS

Diane Williams
Patient's signature

May 14, 1985
Date

Witness: [signature]

23
allergies: ∅
Meds: ∅

MAR 2 : 4

110/58

STH program
women's track. 100-200 m
4x 4:0 Stands

Zuh ∅ elc ∅
4 ∅
wk. 123
Good mountain
fmly ∅

Take home BP
take 2x
weekly

ASA [illegible] 81276
Check & carefully clear
S/S of musculoskeletal carefully explored & noted
STH - 1 cc 2x dly, with
Lidocaine - 2.5 mg as directed

6 months Coach wants pt to have
HCG ? 1 cc Imgvn
no repeat —

UA
COLOR clear yellow
PROT. trace
KETONES (-)
BLOOD (-)
5.0
(-)

PATIENT [ ] MR. [ ] MRS. [X] MISS — LILIAN (FIRST) — (MIDDLE) — WILLIAMS (MAIDEN) — (LAST) — AGE 5 — BIRTHDATE 12/14/80

[X] SINGLE [ ] MARRIED [ ] SEPARATED [ ] DIVORCED [ ] WIDOWED

NAME OF PERSON LEGALLY RESPONSIBLE
(IF PATIENT IS A MINOR, NAME OF PARENT, GUARDIAN, ETC.)

MAILING ADDRESS 877 West El Repetto Dr. 31A (STREET) Monterey Pk (CITY) 91754 (ZIP)

HOME ADDRESS 877 West El Repetto Dr. 31A (STREET) Monterey Pk. (CITY) 91754 (ZIP) HOME PHONE (213) 263-7653

SOCIAL SECURITY NO. 944-60-1717 DRIVERS LICENSE NO. C2983792

PATIENT EMPLOYED BY Puma, USA/Calli: Cubic Seegobian OCCUPATION Sales Representative

BUSINESS ADDRESS 11, E Ventura Blvd (STREET), Encino (CITY), Calif (ZIP) BUSINESS PHONE 981-PUMA

NAME OF SPOUSE (FIRST) (MIDDLE) (MAIDEN) (LAST) AGE

BIRTHDATE

SOCIAL SECURITY NO. DRIVERS LICENSE NO.

SPOUSE EMPLOYED BY: OCCUPATION

BUSINESS ADDRESS (STREET) (CITY) (ZIP) BUSINESS PHONE

NEAREST RELATIVE NOT LIVING WITH YOU MRS. BARBARA FAYE WILLIAMS (FULL NAME) 344 W. 58th Apt 801, Chicago IL 60621 (ADDRESS) (312) 370-0134 (PHONE)

DO YOU HAVE MEDICARE [ ] YES [X] NO #

DO YOU HAVE MEDI-CAL [ ] YES [X] NO #

INSURANCE COMPANY

GROUP NO. & MEMBERSHIP NO.

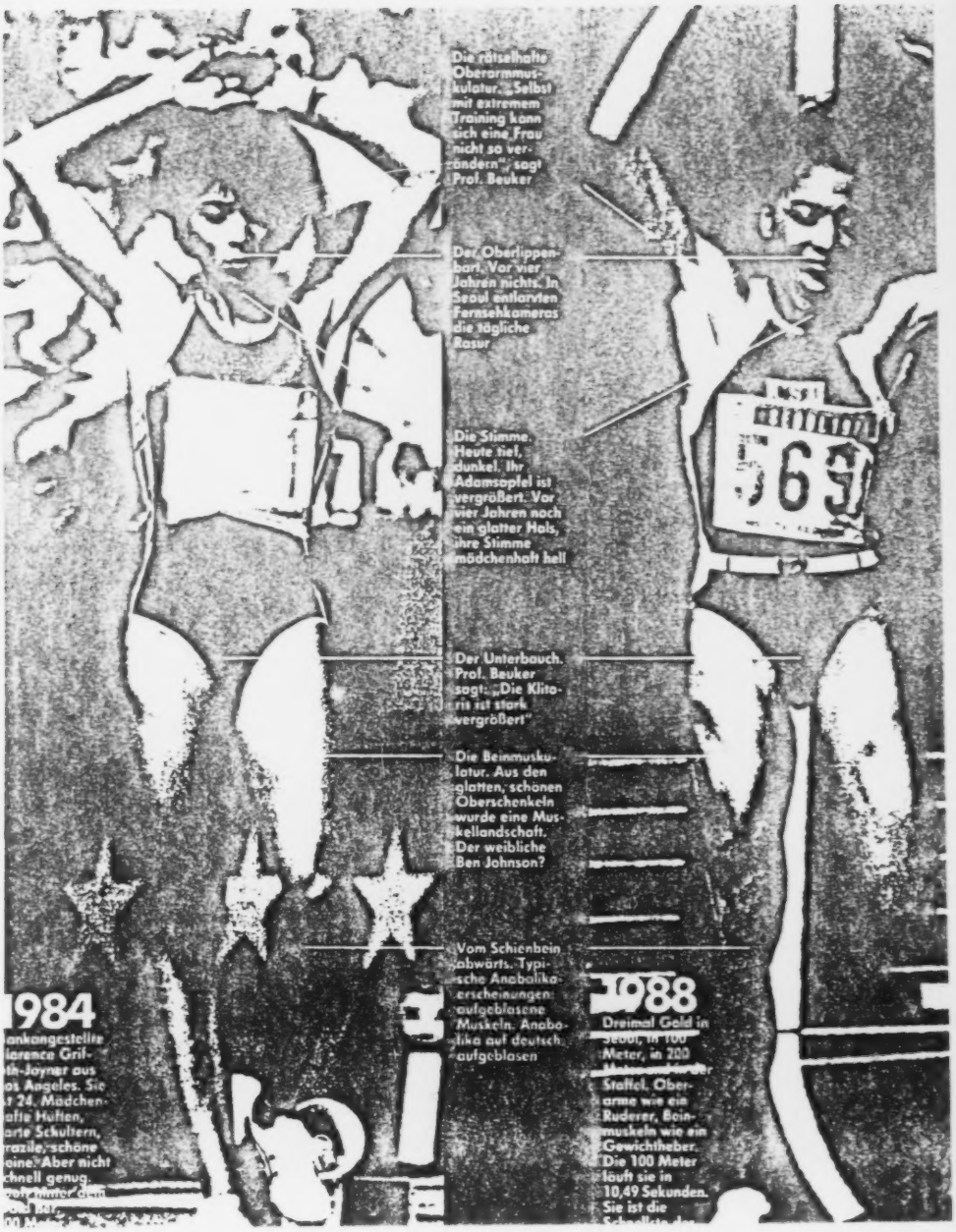
ARE YOU BENEFICIARY [ ] OR DEPENDENT [ ]

LIST ALL OTHER MEMBERS OF IMMEDIATE FAMILY

REFERRED BY: CHUCK R. DEBUS (FULL NAME) 1699 Adrian Way #301 (ADDRESS) Santa Monica Calif. 90401

4514032

ADMINISTRATIVE SPECIALTIES, INC. (213) 333-4541
FORM A-121


Die rätselhafte Oberarmmuskulatur. „Selbst mit extremem Training kann sich eine Frau nicht so verändern", sagt Prof. Beuker
Der Oberlippenbart. Vor vier Jahren nichts. In Seoul entlarvten Fernsehkameras die tägliche Rasur
Die Stimme. Heute tief, dunkel, ihr Adamsapfel ist vergrößert. Vor vier Jahren noch ein glatter Hals, ihre Stimme mädchenhaft hell
Der Unterbauch. Prof. Beuker sagt: „Die Klitoris ist stark vergrößert"
Die Beinmuskulatur. Aus den glatten, schönen Oberschenkeln wurde eine Muskellandschaft. Der weibliche Ben Johnson?
Vom Schienbein abwärts. Typische Anabolikaerscheinungen: aufgeblasene Muskeln. Anabolika auf deutsch: aufgeblasen
1984
ankangestellte
lorence Grif-
th-Joyner aus
os Angeles. Sie
t 24. Mädchen-
afte Hüften,
arte Schultern,
razile, schöne
eine? Aber nicht
chnell genug.
1988
Dreimal Gold in
Seoul, in 100
Meter, in 200
Staffel. Ober-
arme wie ein
Ruderer, Bein-
muskeln wie ein
Gewichtheber.
Die 100 Meter
läuft sie in
10,49 Sekunden.
Sie ist die

NYSCA

NATIONAL YOUTH SPORTS COACHES ASSOCIATION

NYSCA National Research & Development Center

Anabolic Steroid Survey

Study Group - 10 to 14 year old youth sports participants

Dear Survey Participant:

Thank you for participating in this very important research project. This survey is to be completed by youth sports participants in the age range of 10 to 14 years old.

Please answer <u>all</u> questions.

DRAFT
JANUARY, 1989

ARE CHILDREN USING STEROIDS?

Usage of anabolic steroids by athletes has becomes a national concern. Numerous stories regarding professional and collegiate athletes appear with greater frequency in the news. A recent study in Pennsylvania indicated that many high school athletes are also using steroids.

The National Youth Sports Coaches Association National Research and Development Center recently completed a national study involving steroid usage by 10 to 14 year old youth sports participants. The center, located at Northern Kentucky University and directed by Dr. Michael Gray, surveyed over 1,000 youth athletes in 17 demographically located states. Eighty percent of the respondents where males.

The results of this survey indicate some rather startling findings which are cause for national concern. Some of these findings are:

- 78% of the athletes had heard of steroids but only 49% had ever had the side effects of steroid usage explained to them

- In agreement with the above findings, 43% of the children felt that steroids would probably not harm an athlete if they were used carefully

Please answer every question with a (✓) check mark on the appropriate line.

1) Age 9yrs= .0003% 10yrs= 20% 11yrs= 22% 12yrs= 24% 13yrs= 22% 14yrs= 12%
15yrs= .0009% no answer= 2%

2) Sex M 79% F 20%

3) How many years have you played in organized youth league sports?_____

4) What youth league sports do you now play?

Basketball 40% Football 17% Baseball 33%

Softball 10% Soccer 25% Ice Hockey 7%

Swimming 10% Tennis 5% Other 20%

5) Has an adult ever explained anabolic steroids to you?

Yes 49% No 51%

6) Have you ever heard of anabolic steroids?

Yes 78% No 21%

7) Have the side effects of anabolic steroid use ever been explained to you?

Yes 50% No 50%

8) Do you feel that anabolic steroids alone will improve muscle size and strength?

Yes 27% No 30% Not Sure 38%

9) Do you think good nutrition is important to increase muscle mass and strength?

Yes 87% No 4% Not Sure 9%

10) Do you think that using anabolic steroids will improve your performance in your sport?

Yes 23% No 55% Not Sure 22%

11) Would you ever use anabolic steroids to increase your size and improve your strength?

Yes 4% No 84% Not Sure 11%

12) Do you feel that you need to take anabolic steroids to improve your chances for athletic success (college scholarships, world championships, professional contracts, etc.)?

Yes 5% No 84% Not Sure 11%

13) Do you feel that Olympic athletes use anabolic steroids to make the team?

Yes 41% No 32% Not Sure 27%

14) Do you feel that, if used carefully, anabolic steroids will not harm an athlete?

Yes 16% No 56% Not Sure 27%

15) Do you personally know someone who is using or has used anabolic steroids?

Yes 10% No 89%

16) Have you ever been offered anabolic steroids?

Yes 4% No 95%

17) Have you ever used anabolic steroids?

Yes 2% No 97%

If yes, what was the main reason for use? (one answer only)

Personal appearance_____
Athletic performance_____
Body building_____
Don't know_____

18) Do you consider regular anabolic sterold useage the same as having a drug problem? (e.g. cocaine, marijuana, heroin, etc.)

Yes 57% No 24% Not Sure 18%

19) If you decided to use anabolic steroids today, do you know where to obtain them?

Yes 12% No 87%

20) Who do you think should be primarily responsible for teaching you and your teammates about anabolic steroids? (One answer only)

Parents 41% Coaches 42% Teachers 13% Other Athletes 1%

- 55% of the young athletes thought that steroid usage alone would improve muscle size and strength
- 45% felt that steroid usage would improve their sports performance
- 68% of the children felt that Olympic athletes probably used steroids to make the team
- Only 57% of the young athletes felt that regular steroid usage was a drug problem similar to marijuana, cocaine, etc. usage
- Less than 2% indicated they had ever used steroids
- Only 15% indicated they might use steroids to enhance performance
- Only 12% stated they knew where to obtain steroids

A summary of these findings indicates that youth athletes are not using anabolic steroids nor are many of them presently considering the need for usage. Of major concern, however, is the ignorance about steroids and the dangers involved with usage. There also appears to be a perception that steroids enhance sports performance, expecially at the elite level, and that using steroids regularly is not a form of drug abuse.

These findings point out the critical need for educating youth athletes about anabolic steroids so they are better able to make an intelligent decision regarding steroid usage when they enter high school. This survey has also uncovered a potentially

dangerous attitude that athletes begin to develop about steroids at a very early age.